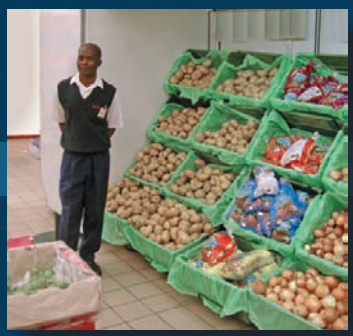
Participatory Market Chain Approach (PMCA)

User Guide

Edited by
Thomas Bernet, Graham Thiele and Thomas Zschocke



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Participatory Market Chain Approach (PMCA)

User Guide

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Thomas Bernet, Graham Thiele and Thomas Zschocke

This manual describes the Participatory Market Chain Approach (PMCA), a new R&D method designed to stimulate innovation along market chains by enhancing stakeholder collaboration and trust. This method grew out of a joint effort made by different R&D organizations and projects (see list on the inside of the back cover), with the aim of finding new ways of intervening in market chains and improving poor farmers' livelihoods. The Papa Andina Initiative of the International Potato Center (CIP) coordinated and guided this work; the Swiss Agency for Development and Cooperation (SDC), the Center for International Agriculture (ZIL) and the UK Department for International Development (DFID) provided the necessary financial support.

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Prologue

"The most practical thing is a good theory."

Shifting towards an innovation focus

In 2001, the Swiss Agency for Development and Cooperation (SDC) launched a new potato project in Peru (INCOPA). Hosted by the International Potato Center (CIP), this project seeks to enhance the competitiveness of small-scale potato producers in Peru. CIP has shown great interest in this approach, and its contribution to the pro-poor research and development cycle, part of its new vision for contributing to poverty reduction.

From RAAKS to PMCA

Engel P. and Salomon M., 1995. Facilitating innovation for development: a RAAKS resource box. Kit Publications, Amsterdam, the Netherlands (available at www.kit.nl).

Thiele G. and Bernet T. (eds), 2005. Conceptos, pautas y herramientas: enfoque participativo en cadenas productivas y plataformas de concertación. CIP, Lima, Peru.

Early on, a Swiss research fellow was integrated into the INCOPA project, so adding methodological strength to it. His task was to develop and validate new approaches to link small-scale farmers to markets. He suggested applying RAAKS (Rapid Appraisal of Agricultural Knowledge Systems) in the context of a market chain, using this action research method to discuss and resolve specific sectoral problems with a range of different stakeholders.

This new area (the market chain) required a strong focus on market demand and the development of joint business opportunities. Thus leading eventually to the creation of the "Participatory Market Chain Approach" or "PMCA": specific guidelines to generate joint innovations in market chains – in agricultural and other sectors.

Validation in South America and Africa

In 2003, the positive results obtained using PMCA in Peru were shared through Papa Andina, a Regional Initiative of CIP supported by the SDC, with partners in Bolivia and Ecuador. The lessons learned from Peru stimulated Bolivian partners to validate the principles and practice of PMCA. In 2005, Papa Andina helped share the PMCA experience with organizations in Uganda through a special project financed by DFID's

Crop Post-Harvest Programme (CPHP). After two training workshops Ugandan partners began to use PMCA as part of their own work, applying it to three different market chains: potato, sweetpotato, and vegetables.

PMCA Workshop with Ugandan partners in the Andes, July 2005

On-going collaboration

This user guide is the product of many constructive and intense discussions involving a large number of R&D staff from different countries. These actors have contributed valuable information and time, and we would like to take this opportunity to thank them sincerely!

However, this user guide should not be seen as the final step in the documentation of PMCA. Inevitably, future applications will provide new insights and help to improve PMCA and the way it is documented. We hope that you will be able to contribute to this process in the future!

Participatory Market Chain Approach (PMCA)

User Guide

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and Thomas Zschocke

Addressing the development challenge of facing rural areas

"Poverty begins with failure to take advantage of existing market opportunities."

Danger of marginalization

Rapid urban growth challenges the development of rural areas, which could become increasingly marginalized as powerful supermarkets and agro-industrial chains determine the "rules of the game", preferring to work with large and well-organized producers.

Limited access to information and contacts jeopardize the position of small producers in the marketplace, making agricultural production unprofitable and risky. This perpetuates poverty and puts at risk the resource base of rural areas. **Human** and **social capital** – especially young people – are lost as **competitiveness** declines, setting in motion a downward spiral that further undermines their ability to compete (see **Figure 1**).

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Escaping the competitiveness trap

Most R&D organizations agree that improved market access is crucial if the competitiveness of rural areas and its producers is to be enhanced. Promoting collaboration along the **market chain**, among different **stakeholders**, is a promising approach to:

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- **Increase efficiency in the market chain**, by lowering the production and transaction costs which occur between the different market chain actors.
- **Enhance the value of the products and services generated along a market chain**, so justifying higher consumer sale prices.

How to intervene in market chains?

Stimulating positive market chain collaboration from the outside is a tricky issue. **Market chain actors** compete with regard to price and quality in their day-to-day business, which apparently inhibits the development of **trust** and concerted action.

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New methodology to stimulate collaboration

The Participatory Market Chain Approach presented in this user guide provides guidelines for R&D organizations confronted with the question of how to effectively intervene in market chains. Based on a three-phase process, PMCA aims to foster the market access of small-scale farmers by generating fruitful collaboration among the different market chain actors. This should help to reverse the declining spiral of competitivity we mentioned above and provide a basis for sustainable rural development (see **Figure 1**).

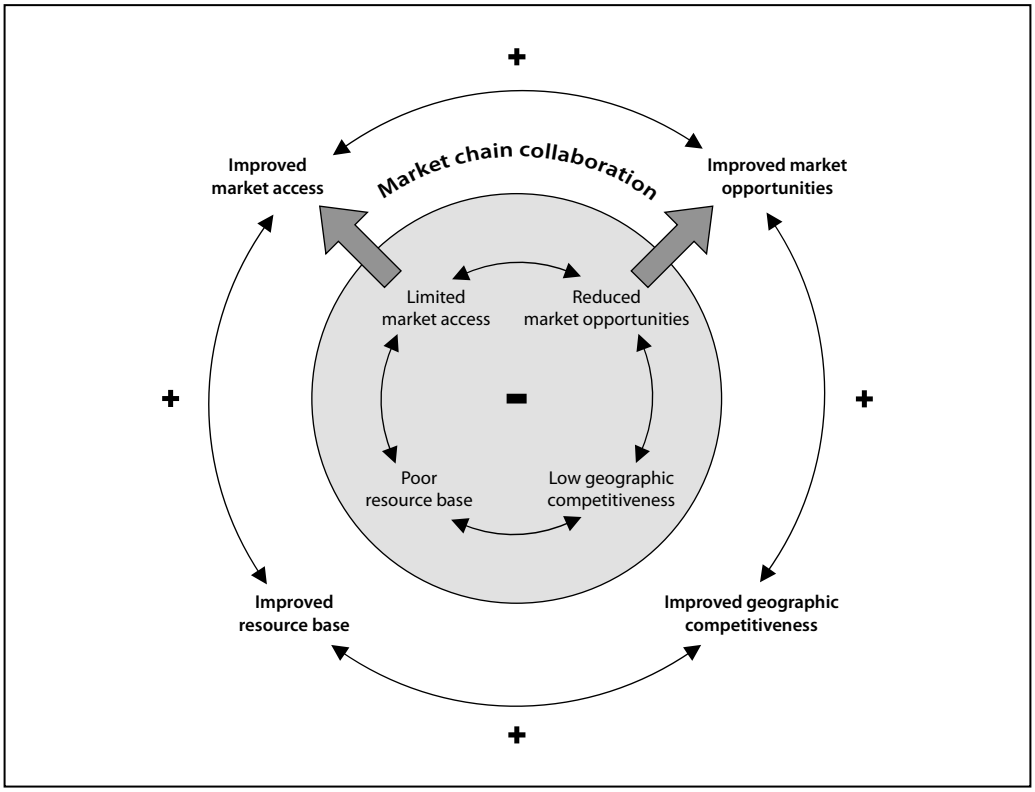

Figure 1 Market chain collaboration: overcoming the "competitiveness trap" that affects rural areas

About this user guide

"Knowing where you want to go is one thing, but getting there is quite another."

Purpose

The main objective of this guide is to present the Participatory Market Chain Approach (PMCA), which aims to stimulate market chain **innovations** by involving different **stakeholders** within a well-structured and demand-oriented process.

By presenting both theory and practice, this guide should enable the leaders to apply the PMCA method in the specific context in which they are working.

Audience

This guide will help:

- **Researchers and development staff** to gain important insights and skills which will allow them to adapt and use PMCA in the context of their own work.
- **R&D project managers and policy makers** to understand, plan and supervise demand-oriented participatory R&D processes that target market chains.
- **Teachers and students** to learn more about rural development, market chain competitiveness, participatory R&D, and marketing. The different development concepts and practical **tools** described are helpful in their own right.

Structure and content

The guide includes the following:

Chapter 1
- **Basic concepts of market chain competitiveness** that influence rural development processes.

Chapter 2
- **The Participatory Market Chain Approach (PMCA)** which describes a three-phase structure aiming to (1) define, (2) analyze and (3) put in place innovations in partnership with market chain actors.

Chapter 3
- **Useful tools** which can be applied in conjunction with PMCA.

Chapter 4
- **First applications of PMCA**, describing four initial experiences with PMCA in Peru, Bolivia and Uganda and drawing important conclusions in each case.

Chapter 5
- **Challenges when using PMCA**, illustrating the problems R&D organizations might face when applying PMCA in their own context.

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- A **Glossary** of relevant technical terms.
- An **Annex** which contains an overview of the PMCA process and which can be used to help plan, implement and evaluate PMCA activities.

Useful textboxes

In order to enhance learning, different sections of this guide contain textboxes designed to provide the reader with insights into the theoretical and practical aspects of PMCA. Each textbox is marked with a symbol which describes its function:

- **Basic Concepts (C)** present important theoretical ideas.

- **Methodological Tips (T)** provide help when dealing with practical aspects of R&D work.

- **Concrete Applications (A)** illustrate examples from different PMCA applications.

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To make this guide easier to use, different sections of the text have been cross-referenced. A small arrow in the left-hand column indicates the section and the page where related information on a subject can be found.

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Basic concepts for market chain competitiveness

Thomas Bernet, Graham Thiele

"The time to compete on your own is over: the winners of today are team players with strong relationships built on trust."

Content of this chapter

This chapter presents a set of linked theoretical concepts that underpin the practical work with the Participatory Market Chain Approach.

Introduction

How to compete in the global market?

Market globalization poses a considerable challenge to farmers and those living in rural areas in developing countries, where inadequate infrastructure and limited access to information and technology increase both production and transaction costs. So, how can producers compete in such markets, which are more and more demanding with regard to product quality and timely delivery?

An ongoing process of innovation is needed along the market chain, which should enable those involved to constantly identify and take advantage of new market opportunities, thus positively affecting rural producers. To make this happen, the actors involved must be given the opportunity to fruitfully interact and build mutual trust. Only in this way will optimum use be made of available resources, which are transformed into products and services that are of value to market chain actors and consumers.

But how can such collaboration be achieved in a situation where actors mistrust each other because they compete daily negotiating for more favourable prices, quality and terms of payment?

Contribution of PMCA to rural development

The Participatory Market Chain Approach (PMCA) fills a methodological gap. It is an instrument for facilitating change in market chains that lack coordination, so creating an environment that fosters interaction among market chain actors, promotes mutual learning and trust and stimulates shared innovations.

Such an innovation process should create a "virtuous circle" that improves the development environment of rural areas, increasing the competitiveness not only of the market chain but also of the communities and producers, who are **empowered** as they benefit from improved access to markets, contacts and information (see **Figure 2**).

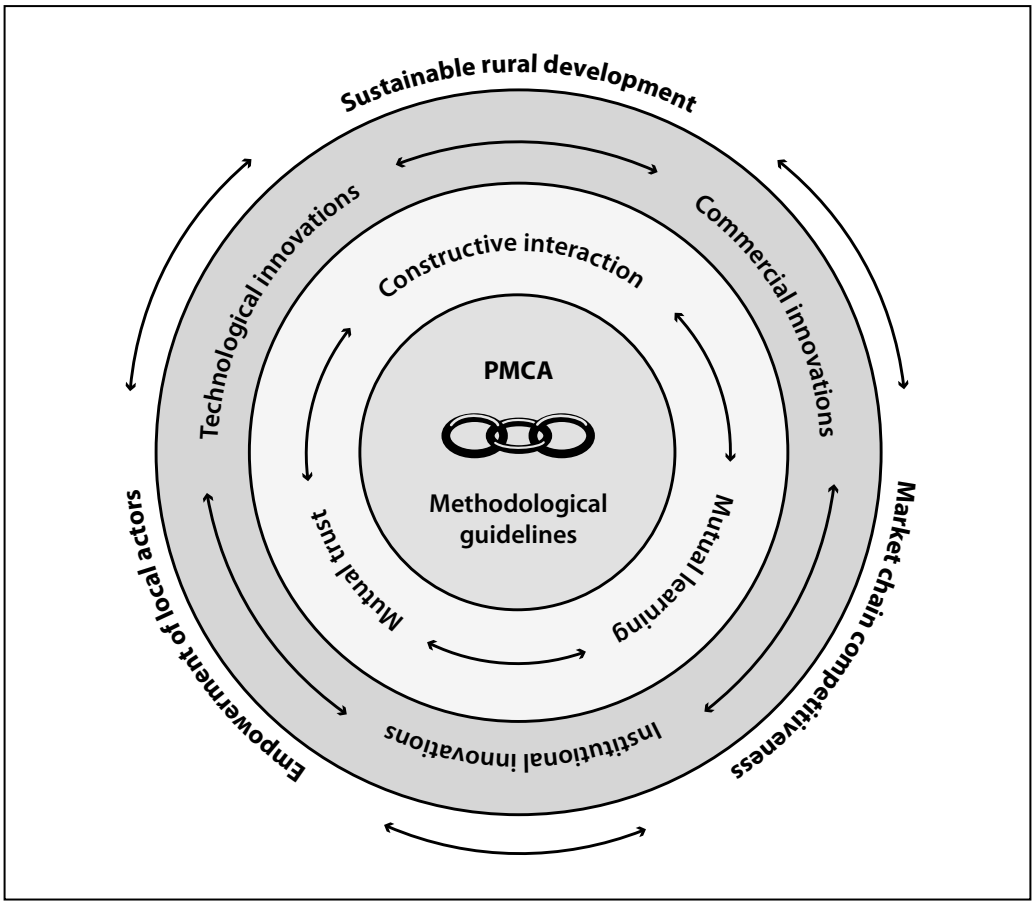

Figure 2 PMCA creates a virtuous circle for enhancing rural development

Local development and market chain competitiveness

Access to different types of capital

The basis for any productive activity is capital: resources that make production possible and create value. Five different types of capital can be distinguished:

- **Natural capital** – environmental factors needed in the production process, such as land and water.
- **Infrastructure** – physical assets that facilitate production processes, such as tools and machines, buildings, roads and irrigation systems.
- **Financial capital** – cash and monetary reserves that provide liquidity for production processes.
- **Human capital** – people's knowledge and abilities that drive production processes.
- **Social capital** – organizations, networks and institutions that facilitate cooperative action amongst different actors.

Quest for capital development

The development of a geographic area requires an optimal combination of different capital types. Together, infrastructure, and natural and financial capital lay the foundations for development processes; however, human and social capital (see **Box C1**) become more and more important in that they drive and catalyze such processes and enhance **value addition**.

Neither **human** nor **social capital** are depleted by use. Rather, they are depleted by non-use: "use it or lose it!" These types of capital are crucial to development processes that enhance **competitiveness**. But, how can they be built up?

Good collaboration along the market chain

Strategic linkages between geographic areas and competitive market chains are essential. Local actors, linked to primary production, must collaborate with those actors who are able to enter the market with products and services that are valuable to consumers and profitable to all involved in the production process for those actors based in rural areas. This not only enhances incomes, but also local development in general, through the cre-

ABC ation and use of **social** and **human capital**, which opens up new opportunities (see **Figure 3**).

C1. Human and social capital

Human capital refers to an individual's capacities, personal skills and knowledge, all of which help to optimize processes and results. This type of capital is gained by education and through personal experience. It is very different from **social capital**, which is developed between people, through positive relationships and networking. Through the building of empathy, trust and mutual obligations, social capital facilitates fruitful interaction and consensus-based decision-making. When doing business, social capital lowers transaction costs and reduces the risk involved in taking decisions.

Like other forms of capital, both human and social capital are created and improved through investment. While **human capital** requires investment in personal education and practical experience, **social capital** needs investment in the form of continuous interaction among the actors involved.

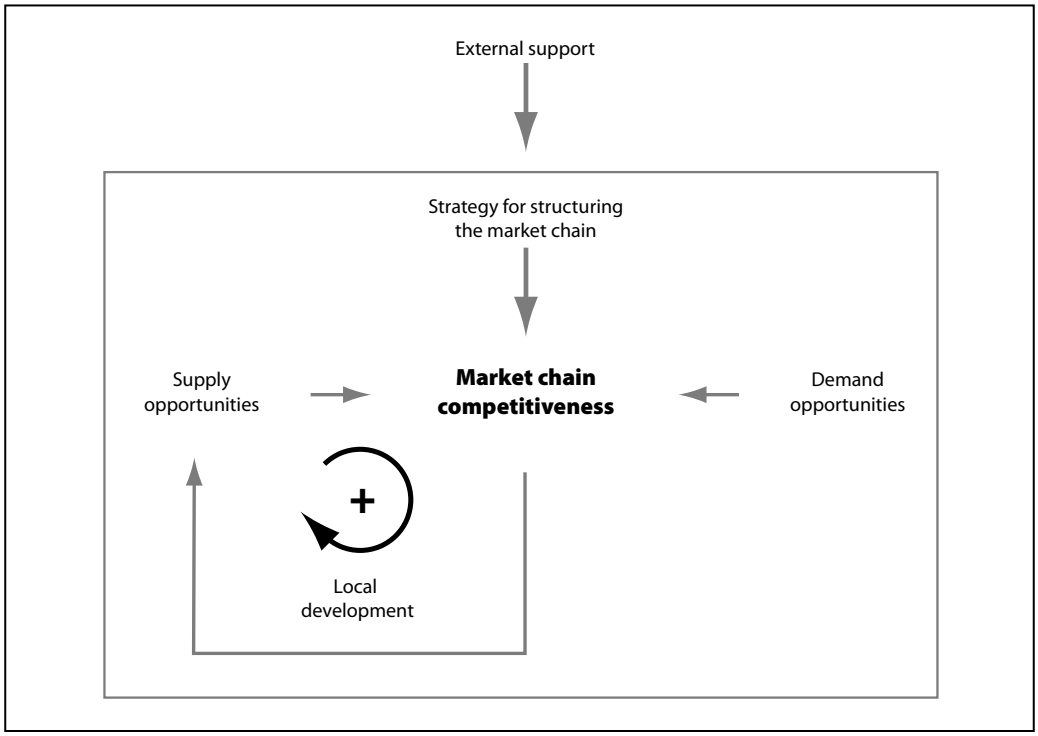

Figure 3 Market chain competitiveness and local development

Strategic external support

External R&D organizations can help bring together different **actors** involved in the **market chain** and define viable commercial strategies for the entire market chain. As external entities, such organizations can suggest and promote new ways of commercialization and provide facilitation for participatory processes that enhance collaboration among market chain actors, build human and social capital (see **Box C1**) and foster market chain competitiveness and hence rural development (see **Figure 3**).

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p. 4

Overcoming hurdles

A major challenge faced by any effort to link rural areas with competitive market chains relates to quality standards. Food safety, for example, has become an important concern of today's consumers. This global issue puts developing countries in a difficult situation, as they have to respond to this emerging requirement with standards for traceability and certification schemes that ensure that good manufacturing practices are followed.

These new market requirements are an obstacle; but, they also offer an opportunity for those who seek to enhance both production and product quality. Tracing the quality of a product as it journeys through the manufacturing process will definitely foster teamwork among market chain actors and enable them to identify and take advantage of both new and existing joint business opportunities.

At the same time, the enforcement of quality standards may also improve collaboration among producers and allow price premiums that consumers are willing to pay. For instance, organic production and "fair trade" force producers to work closely together in order to comply with certification while simultaneously forging closer links between producers and consumers (because such business schemes advocate social responsibility).

Innovations along market chains

Response to changing needs

"Competitiveness" is only achieved if the actors in a market chain are continuously able to provide goods and services that have sufficient consumer value to ensure profitability. Thus, competitiveness is not a static, but a dynamic concept: once achieved continuous adjustments must be made to sustain it!

As a consequence, market chains must respond to changes in demand, competition, policy and availability of resources (i.e. production factors). Thus, the competitiveness of market chains relies on the actors involved being able to innovate and create value in a changing environment.

Life cycles of innovations

Like products, innovations also have a life cycle (see **Figure 4**). The challenge faced by market chains is the need to constantly adapt and respond to changes in the market environment. When responding to such change, two possible paths may be followed: (1) market chain actors can take advantage of a growing market opportunity along its life cycle (**A** in **Figure 4**); and (2) they can switch to new business opportunities that hold greater promise for the future (**B** in **Figure 4**), especially if existing opportunities stagnate.

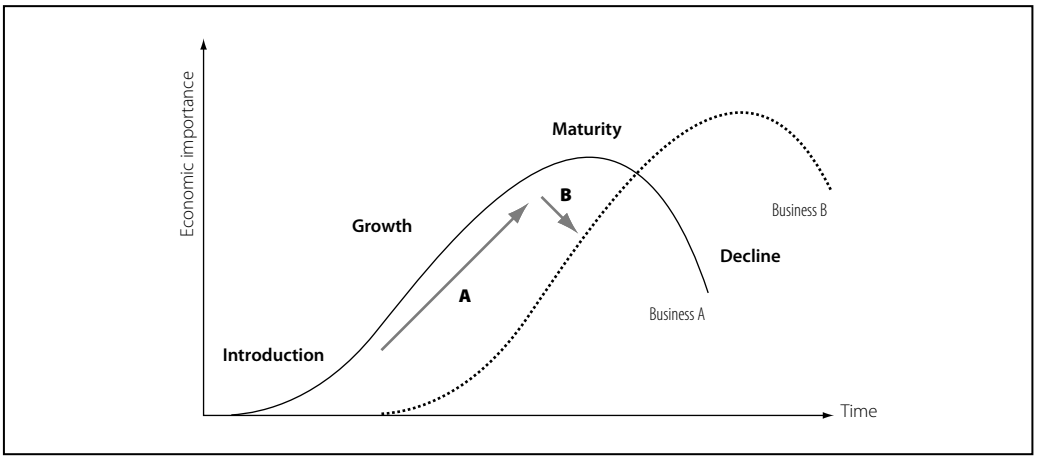

Figure 4 **Business strategies related to innovations' life cycles**

Actively responding to changing demand

Innovations don't just happen. They are part of a process that defines and implements new ideas to enhance consumer satisfaction, on the one hand, and to use available resources efficiently, on the other. The changes undertaken to ensure such value-adding must focus on real needs and opportunities.

Innovations do not always have to have a high degree of novelty, and must be distinguished from inventions: many inventions exist that have never generated revenue! Innovations may be achieved simply through combining and adapting things which are already known and applying them to a new context, thus generating value for the innovation's users (see **Box C2**).

C2. Invention versus innovation

> Both **invention** and **innovation** imply something new. While an **invention** is a discovery – a new idea or a product presented to the public for the first time – an **innovation** refers to something new and useful that has a real market value. In this sense, innovations always respond to a demand; they can be based on inventions, but most of the time they are simply driven by a new or improved combination of already-existing ideas and activities where the value of a product is increased for both consumers and producers.

Identifying options that create uniqueness

As part of a good communication strategy, trademarks and labels can be effective mechanisms for differentiating products in the marketplace. These not only add value to the product, but also make the product unique by differentiating it from similar products. This uniqueness might be of great relevance for the consumer – who might feel better about not buying a conventional mass-market product; but it is also relevant for producers, who protect themselves from competitors and have more leverage to influence the price received for their products. In other words, producers have greater negotiating power if nobody else, or only few competitors, are able to offer the same product.

Building trust among different stakeholders

Profitability of trust

The starting point for innovation in market chains is the creation of a high level of trust among the actors involved: trust allows actors to communicate efficiently, develop a shared vision and strategically implement activities that put that vision into practice. The higher the degree of trust, the better the results that can be expected from collaborative processes!

Smoothing collaboration

In market chains, "internal trust" (**I** in **Figure 5**) is the "grease" that ensures that there is an optimal amount of contact between the productive activities: this avoids undesired friction among the actors in the chain, as such friction could damage the chain. At the same time, "external trust" (**E** in **Figure 5**) ensures an optimal level of interaction with outside actors, i.e. those who are not part of the chain, but whose activities affect it in different ways (through the provision of services and technologies, research, laws, financial support, etc.).

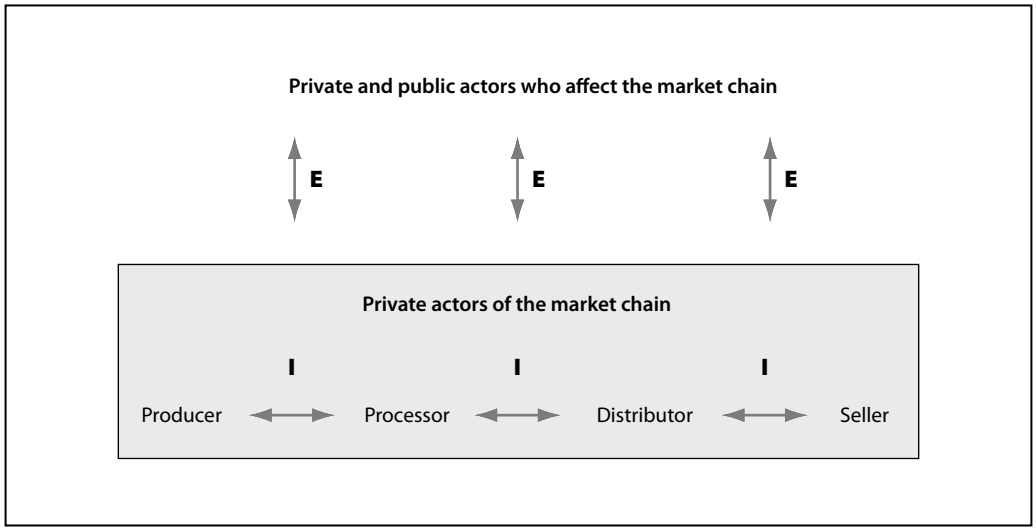

Figure 5 Internal (I) and external trust (E) in market chains

Catalysing joint innovations

Trust among the actors involved in a market chain, and those influencing it, creates an environment that is conducive to innovation by:

- Increasing the quality of the information exchange, fostering creativity and learning.
- Reducing the time taken to reach agreements.
- Facilitating the definition of new activities and encouraging people to assume leadership roles and take risks.
- Increasing the potential for conflict resolution.
- Promoting personal satisfaction and helping to integrate new actors into the interaction.
- Allowing "trustworthy people" to develop leadership legitimacy, enabling them to coordinate activities along the market chain.

Creating trust with leadership

Trust does not happen automatically – it must be built, little by little! This is especially true in market chains, where trust slowly grows out of positive social interactions that must be carefully nurtured by wise facilitators. Such facilitators must have the legitimacy and skills necessary to lead such market-oriented innovation processes, and must "capitalize" on the good ideas shared among stakeholders. Without such leadership, it is very likely that excellent joint market opportunities will never make it to fruition!

Actors with leadership legitimacy

Who displays such "leadership legitimacy"? Their followers would call them "trustworthy people" – people who, through their position and actions, have proven that their intentions and ideas benefit everyone (see **Box C3**). Such "market chain leaders" can be "insiders" (e.g. market chain actors) or "outsiders" (e.g. R&D staff).

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C3. Prerequisites for gaining leadership legitimacy

Within organizations, **leadership legitimacy** can be represented on an organizational chart. Outside of formal organizations, however, where actors are independent and participate freely in a relatively informal environment, no one can be a self-proclaimed leader; in such situations, leadership legitimacy must be developed and gained!

The process by which a person obtains leadership legitimacy involves a series of activities that prove that this person "can be trusted". Initially, a "clean" history can provide a good start, as can the perception that the person is not acting merely out of personal interests. Ultimately, the granting of leadership legitimacy will depend on the following:

- Whether a person's deeds match their words.
- Whether their ideas and deeds benefit the other actors.
- Whether they are able to listen to others and involve them when forwarding ideas and implementing activities.

Note: Followers are always very alert, and will constantly seek to verify the leader's good intentions and to confirm who benefits from his or her leadership. Gaining the legitimacy necessary to lead takes time and effort, but it can be lost in an instant through a badly judged action or decision.

Overcoming mistrust in market chains

Given the low level of trust within many market chains, it is particularly important to establish good leadership. "Market chain leaders" help to build a trust-enhancing environment conducive to the innovations being sought. Because dysfunctional chains tend to suffer from horizontal and vertical competition among their members (see **Box C4**), trust building needs to address these two different dimensions of competition in an explicit way.

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Sceptical potato farmers in a meeting in the Peruvian highlands

C4. Horizontal and vertical mistrust in market chains

Two different dimensions of mistrust occur within market chains, and both need to be targeted, but with different measures.

Horizontal mistrust: Actors with similar activities in a market chain compete when selling or purchasing specific products and services. Hence, they fight to obtain the best market share, prices and transaction conditions. Such competition is very pronounced if commodities are involved, when large volumes of merchandise are commercialized wholesale in a saturated market. The proximity of the actors (i.e. the producers in the production area, the merchants in the wholesale market, processors and supermarkets in urban areas) aggravates the situation, because it enhances jealousy and makes any existing opportunism visible.

Vertical mistrust: Actors taking part in different activities along the market chain fight to safeguard their own profits, jeopardizing the margins of both buyers and sellers. Daily negotiations over price, quality, delivery conditions and payment (especially in saturated markets, where profits are reduced to a minimum) give an edge to those who take advantage of others by means of dubious business practices (such as offering inferior products, providing short weights and delaying payments, etc.). As a consequence, it is not surprising that even "above-board" transactions involve a high level of distrust!

Wholesalers competing in Lima's main potato market

Participatory processes for market chain development

Playing the "outsider" card

Because they do not have commercial interests, R&D organizations are in a good position to lead the participatory processes required in market chains and bring together actors who mistrust each other but are interested in sharing ideas about new business options. Moreover, because of their prestige, R&D organizations may be better placed than other actors to access key information and contacts in order to stimulate innovation processes.

Targeting poverty

Participatory processes also help economically and geographically marginalized actors to access new opportunities by forming links with other market-chain actors. Such collaboration not only increases income, it acts as a viable strategy of **"empowerment"** by enhancing people's access to knowledge, skills and contacts. All these aspects will positively influence the social, economic, and cultural environment of the actors involved, giving them more room to make sound decisions to improve their living conditions (see **Box C5**).

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C5. Empowerment and gender

Empowerment and **gender** are linked concepts. **Empowerment** can be defined as the expansion of poor people's ability to participate in, negotiate with, influence, control and hold accountable factors that affect their livelihoods. Empowerment focuses on four aspects of an individual's social life and integration:

- The individual's ability to make informed and better decisions.
- The individual's inclusion and participation in decision-making processes.
- The level of transparency and accountability associated with the use of resources.
- The capacity to organize cooperative action at a local level.

Gender equity is one dimension of empowerment. Gender analysis considers the social, cultural and economic roles and relationships that govern the lives of women and men. Specifically, it looks at:

- How masculinity and femininity are defined and how people live according to such definitions.
- How power is distributed between men and women.
- How the social roles and needs of women and men are defined.
- How institutions are shaped to include gender dimensions.

United Nations Environment Programme
Global Environment Outlook Year Book
2004/5 (www.unep.org)

Focus on shared interests

Because market chains are often characterized by informality and distrust, R&D organizations must ensure that there is fruitful interaction and that people actively participate in participatory processes. To this end, therefore, they must focus the process on the shared interests of the stakeholders. This will help to generate a joint vision and activities that tend to benefit all, or at least most, of the stakeholders involved.

Facilitating fruitful interactions

The creation of an environment that favors an open and positive exchange of ideas is fundamental to the construction of effective market chains. Since such a favourable environment for interaction is not given per se, it must be actively put into practice by explicit process facilitators (see **Box C6**).

C6. Developing constructive interactions

Interaction is only constructive if the actors participate actively and respectfully in the exchange of information involved. This requires a facilitator who is able to integrate and motivate different actors and coordinate an exchange of information, so as to arrive at a common vision based on shared interests. The facilitator must create an environment for interaction where:

- The style and content of the interaction build trust.
- Jointly formulated interests guide the innovation process.
- There is a culture of tolerance, which allows people to accept and learn from errors.
- Key actors receive special attention.

Fast learning is needed

However, though they do have certain advantages, R&D organizations are challenged by the fact that they often have only a limited understanding of all the factors and interests affecting the various links in the market chain and the transactions which occur between them. Initially, facilitators from R&D organizations will likely lack insights into the different tricks of commercialization, and may feel insecure when facilitating interactions among "real life experts" who know the entire business inside out.

As a consequence, it is essential that facilitators learn rapidly from market chain actors, as this will allow them to maintain the quality of the participatory process and enhance their own leadership legitimacy.

Practical challenge with guidance

Intervening in market chains in such a way that all the actors involved feel comfortable to collaborate in creating shared innovations is a tough task! A good understanding of the market chain is needed, on both a conceptual and a practical level, and this must be coupled with adequate facilitation skills.

We hope that reading this chapter has provided you with important insights and has helped you to take on this important task – or has at least motivated you sufficiently to read the next chapter!

New culinary creations made from dehydrated potatoes

Participatory market chain approach (PMCA)

Thomas Bernet, Graham Thiele

"Shared interests and mutual trust are the pillars of any good collaboration."

Content of this chapter

This chapter presents the three-phase structure of PMCA. It details the objectives and content of each phase and gives advice for coping with the practical issues when implementing PMCA and consolidating the outcome achieved.

Introduction

Shift from project to process thinking

The PMCA's process-based way of approaching market chains challenges ordinary project-based thinking. For years, public R&D work has targeted production constraints, leaving market-related issues to the private sector. In many cases, despite improved technology, producers are not better off, since market access problems and low prices have kept incomes down. R&D organizations need to play a more active role in enhancing market access and the competitiveness of their main beneficiaries. This requires substantial changes in current R&D practice: organizations need new approaches to intervene systematically in market chains, and new skills to do this efficiently!

Bridging theory and practice

We are aware of the difficulty in closing the gap between (1) understanding a new method and (2) having the skills necessary to adopt and apply it in practice. That's why we present both the theoretical and practical aspects of PMCA in this guide, to communicate both "know-ledge" and "do-ledge". Inevitably, this guide will not be able to answer all your questions about how to apply PMCA in the specific situation you face. Much learning will take place once you begin using PMCA as part of your own work…

Combining old and new ideas

As an R&D practitioner, you will discover that PMCA builds on concepts and tools that you might already be familiar with. So, what's new about PMCA?

PMCA provides a systematic participatory process that will help you and your R&D organization to intervene more effectively in market chains. It does this by integrating old and new ideas, concepts, and tools. Methodologically, PMCA seeks to:

- **Combine R&D activities** in participatory processes.
- **Build trust** among market chain actors as a prerequisite for successful collaboration.
- **Stimulate innovation** among market chain actors on the basis of demand-oriented interactions.

What you should learn from this chapter

After reading this chapter, you should understand the logic of PMCA: how it tries to build a bridge for market chain actors (who are themselves part of the "bridge" built), thus enabling them to overcome a difficult context through enhanced collaboration and to profit from tangible benefits (see **Figure 6**). More practical insights are provided in subsequent chapters, which describe useful tools and the first applications of PMCA.

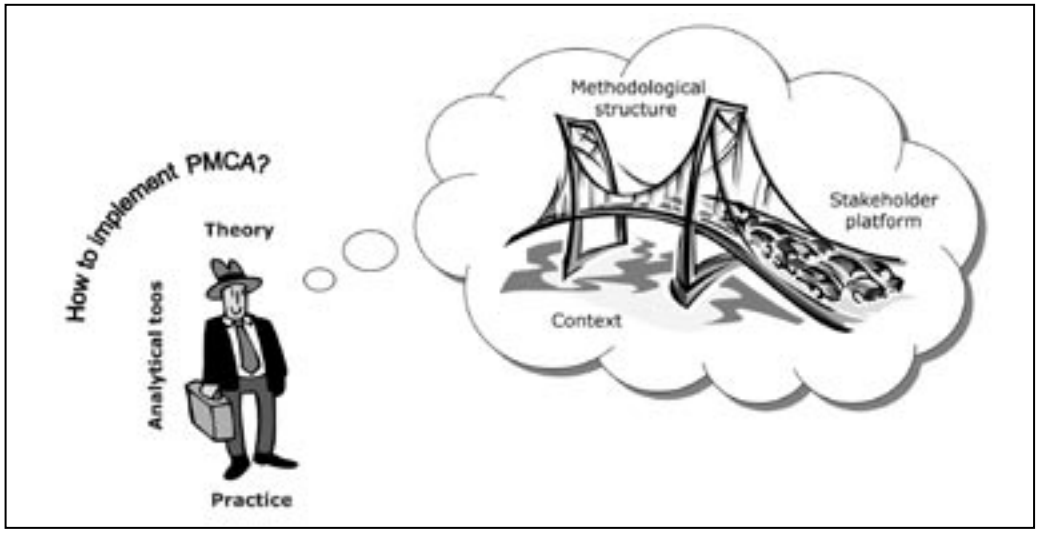

Figure 6 PMCA as a conceptual plan to construct a bridge: A well-grounded platform that generates tangible benefits for its users

What is PMCA?

PMCA in brief

PMCA is an approach that helps to structure participatory processes that involve different market chain actors. In this way, it aims to stimulate joint innovations based on shared ideas and trust (see **Box C7**).

C7. PMCA letter by letter

"P" stands for **"Participatory"**: PMCA involves interested stakeholders, making them part of a process in which most decisions are taken democratically.
"MC" stands for **"Market Chain"**: PMCA links the different actors involved in a market chain, from producers to consumers.
"A" stands for **"Approach"**: PMCA provides a methodological framework, the content of which can be adapted.

As an approach (see **Box C8**), PMCA provides process-based guidelines and concepts that can be adapted to specific market chain situations. Thus, how PMCA is implemented will vary from case to case, as different contexts will require different activities and tools to solve specific problems. In other words, the common denominator of PMCA is not so much "what" is being done but rather "how" it is done; with a generic three-phase process, outlined below, and a strong focus on market demand and trust building.

C8. Definition of tool, method and approach

Tools are well-defined instruments, and specific tools are needed to solve specific problems. As a result, different situations and problems require different tools (e.g. a hammer or a chisel).
Methods are the techniques or routines used to analyze and handle complex situations. They consist of a series of well-specified components; however, the way in which they are used differs according to the situation or problem (e.g. wood carving).
Approaches are the guidelines which govern generic processes to reach a certain practical outcome. They outline how one should approach a type of situation, and are independent of the context-specific tools that should be used in each case (e.g. the principles of furniture design).

Stimulating innovations based on demand

PMCA focuses upon stimulating market chain innovations and creating tangible benefits for the stakeholders involved. Depending on the specific situation and the interests of the R&D organization leading the process and the market chain actors involved, the type of **innovations** that emerge from PMCA vary. Innovations are of different types:

- **Commercial innovations** involve the creation of new products and services. They don't need to be entirely new (i.e., something that has never been seen before). Rather, their novelty may be attributed to a new processing idea or simply a novel package design.
- **Technological innovations** involve the implementation of new technologies or the application of new practices. From the perspective of the user, however, it may mean that existing technologies or practices are simply adapted and adopted in a new context.
- **Institutional innovations** are new ways of interacting or collaborating. These can be formal or informal in character. In practice, they might involve the reinforcement of mutual obligations (e.g. contract agriculture) or the constitution of legally recognized organizations (e.g. an association of market chain actors).

Design of the three-phase process

The PMCA involves market chain actors in a well-structured and well-led participatory R&D process that aims to (1) identify, (2) analyze and (3) put in practice new joint innovations.

During this process, PMCA is used to try and gradually increase the level of (1) interest, (2) trust and (3) collaboration among the market chain actors involved. In order to empower market chain actors and ensure that they develop ownership of the innovations generated, the role of the R&D organization applying PMCA should progressively shift from (1) leadership, towards (2) facilitation and finally (3) backstopping.

PMCA has three explicit phases addressing each objective that systematically promote this shift in roles. Each phase has a clear general objective and its own logic, although specific activities in each phase vary as needs dictate (see **Figure 7**).

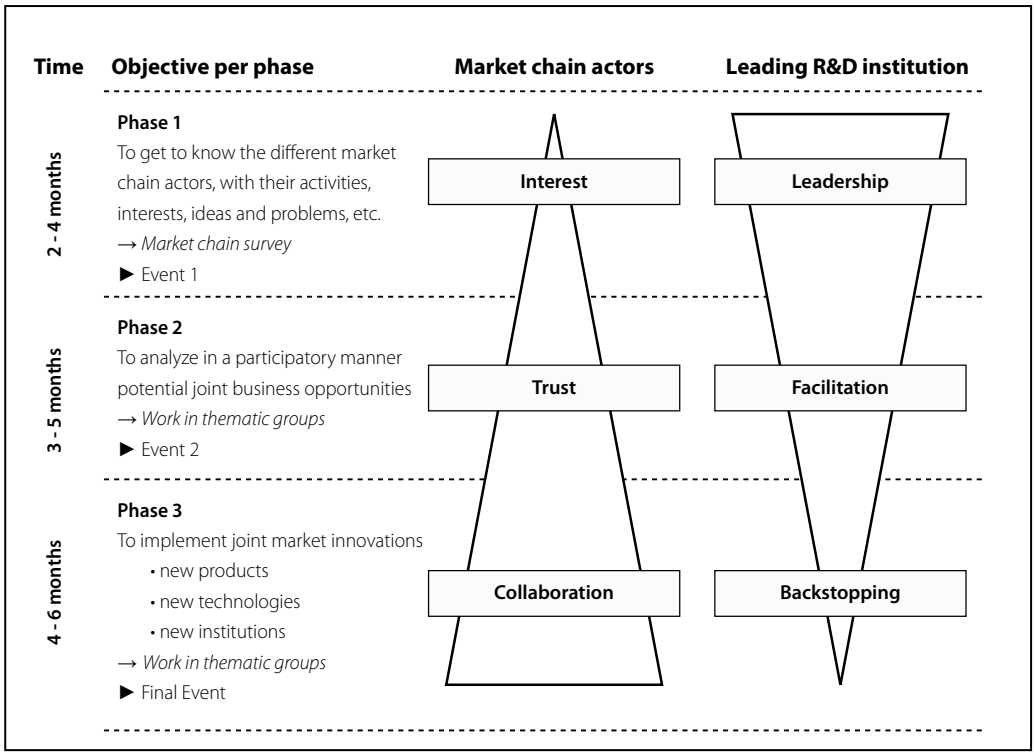

Figure 7 **Structure and objectives of the three phases of the PMCA**

Core work in thematic groups

PMCA seeks to involve market chain actors actively in the participatory process. To do this effectively, an initial rapid market chain survey is conducted during Phase 1, in order to identify two to three central themes. This allows stakeholders to interact in smaller groups based on these themes during Phases 2 and 3. Each thematic group contains 10 to 20 people, and the R&D organization involved provides facilitators that lead the interaction. It is their responsibility to ensure that discussions are demand-focused, that decisions are taken democratically and that a good level of progress is achieved in each thematic group meeting.

Each phase has its own final event

Each phase has its own final event (see **Figure 7**), wherein activities and the results of each phase are presented to a larger audience of interested stakeholders, including market chain actors, R&D organizations and donors etc. In Phase 1, the R&D organization presents the results of the initial market chain survey, while in Phases 2 and 3, the stakeholders involved in the different thematic groups present the groups' work and achievements.

These final and larger events are an important methodological element of PMCA, as they help to structure the participatory process and visualize the achievements at different stages: making progress visible maintains motivation and participation!

At the same time, these events provide important opportunities for active interaction, empowering participating key actors by allowing them to gain responsibility and recognition; in addition, they also facilitate the inclusion of new actors in the PMCA process, when, for instance, the different thematic groups lack specific knowledge or business contacts.

Demand led R&D activities

Since PMCA basically describes a generic three-phase structure for market chain interventions, the content of each phase is context-specific. In other words, the leading R&D organization must, in each case, decide which specific activities are needed to respond to demands from the group and help work progress. The activities taken on by each group may vary, including group discussions, field visits, market surveys, outsourced research, etc. While work is coordinated in the thematic group meetings, different persons may be in charge of conducting the different activities: participatory market chain actors, researchers, hired consultants or the facilitator him- or herself.

Providing a set of helpful tools

To provide practical methodological help, this guide includes a set of tools that can prove useful when designing and conducting the different R&D activities undertaken at different stages of the PMCA process (see **Table 1**); these are detailed in the following chapter.

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Table 1 Overview of useful tools included in PMCA

Objective for phase	Useful tools
Phase 1: Get to know the different actors in the chain and their situation	**Tool 1** Impact filter **Tool 2** Market chain sketch
Phase 2: Analyze potential business opportunities in a participatory manner	**Tool 3** Rapid market appraisal **Tool 4** Quantitative market study **Tool 5** Focus groups
Phase 3: Put into practice joint innovations	**Tool 6** Marketing concept development **Tool 7** Business plan

Flexibility of PMCA

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As mentioned previously, PMCA is characterized by three phases, each of which has an objective and its own process logic (see **Figure 7**). This allows a lot of flexibility, as PMCA should be adapted to different contexts. PMCA is flexible with regard to:

- **Target** – First and foremost, PMCA is intended to be applied to a specific market chain. However, it could also be used in a context which involves several commodities with similar characteristics (such as organic vegetables or fresh fruit).
- **Accuracy** – The precision used when analyzing potential joint innovations will depend on the R&D organization using this method. PMCA is flexible in this sense, as it can either be used in a very qualitative manner, or in a more quantitative, 'data intensive' way. This said, however, it should be remembered that greater data accuracy raises research costs and may put at risk the active participation of key stakeholders as the research involved takes more time.
- **Duration** – Duration depends on the content and progress achieved in each application. PMCA is flexible in terms of time. However, to guarantee progress and ensure that those involved retain the motivation needed to participate actively, it has been shown that, ideally, each phase should not last more than five months.

"Sustainability logic" of PMCA

PMCA suggests concluding its process with a large final event, during which achievements are presented to the public. Although not all R&D work might be finished by this point, explicitly ending the PMCA process in this way is strategically important: the final event clearly communicates that at this stage the innovations achieved are in the hands of the market chain actors, who by then must feel and be responsible to take them forward on their own.

Psychologically, this transfer of ownership is very important, as it consolidates the perception that the R&D organization is not the real owner of the innovations, despite the considerable efforts they have made. This insight is relevant for both the market chain actors and the R&D organization that leads the PMCA process!

Further support on demand

Although the PMCA process ends explicitly with a final large event, this does not mean that the R&D organization should step completely out of the picture. On the contrary, in many cases, further support from the R&D organization plays a key role. However, this new and different role must be clearly defined in order to consolidate PMCA's outcome with well-defined interventions, based on specific requests and needs of market chain actors who take the innovations forward.

Continuing support, for instance, might be important when small-scale producers should be trained and organized, to enable them to respond better to market opportunities identified through PMCA. Also, further research might be required to remove bottlenecks in production, storage and processing, etc. This said, however, in these follow-up activities the R&D organization must be clear that it cannot play the role of the private sector. That is, it cannot get involved in marketing on its own and nor should it subsidize activities that are strictly commercial!

PMCA Phase 1

Getting to know and understand market chain actors

Objective of Phase 1

The objective of PMCA's first phase is to allow the R&D organization using this method to become familiar with the targeted market chain and its actors, and to identify potential innovations based on the shared interests of the stakeholders involved. Potential innovations suggested at the end of this phase are analyzed in more detail in Phase 2.

Structure and useful tools of Phase 1

Phase 1 consists of three steps (see **Table 2**). However, depending on the knowledge base and contacts of the R&D organization using PMCA, Step 1 might be omitted or conducted over a shorter period.

Table 2 Overview of the steps involved in Phase 1

Structure of Phase 1	Time frame	Useful activities and tools
Step 1. Rapid assessment of the market chain	3 to 6 weeks	
Step 2. Definition of thematic groups	1 day	Tool 1: Impact Filter
Step 3. Planning the final event of Phase 1	3 to 5 weeks	Tool 2: Market Chain Sketch

Step

Rapid assessment of the market chain

This first step consists of a rapid and qualitative study of the market chain being considered, and is based on 20 to 40 interviews, involving different market chain actors plus staff from governmental and non-governmental organizations (NGOs). The survey enables the leading R&D organization to do the following:

- To get to know the various key actors in the chain.
- To understand the circumstances and practices of the actors involved in a market being considered.
- To identify bottlenecks and opportunities associated with the various links in the chain (i.e. production, commercialization, processing, use and consumption).
- To explore market opportunities that could be exploited by means of better collaboration among the market chain actors.
- To make the actors interviewed aware of existing limitations and of possible opportunities for collaboration in the market chain.
- To make interviewees feel that they are the real "market chain experts", and motivate them to participate in the final event of Phase 1, when options for collaboration are discussed.

Characterization of the market chain

Once the market chain is identified, information must be gathered in order to gain a better understanding of the different activities of the chain. Such information can be obtained from either primary sources (e.g. interviews with people who know the market chain well) or secondary sources (e.g. statistical data and studies that provide information about production cycles, supply and processing volumes, prices, volume and frequency of sales and consumption, etc.).

Planning of interview sessions

Next, a team containing two or three interviewers is formed. If possible, this team should consist of people with different professional backgrounds, who together define the structure and content of interviews. Guidance questions are formulated which give a basic structure to the interviews. During the interviews these guidance questions can be used as a checklist, to ensure that all relevant topics are covered (see **Box T1**). The team should take care to keep interviews short so that the actors involved don't get tired or annoyed!

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T1. Preparation of guidance questions

The **guidance questions** should cover all the relevant themes included in the market chain survey. They should aim to assess current market chain collaboration and potential joint opportunities. The following guidance questions may help you to structure and guide this type of interview:

1. Can you briefly describe your activities and your involvement in this specific market chain?
2. Why are you involved in these activities and how do you perceive your business in general?
3. Who are your most important suppliers and clients, and how well do you collaborate with them?
4. What are the main problems you face in your activities and in the market chain?
5. How well do you feel R&D organizations support the market chain?
6. How do you think your business and the market chain could be improved?
7. What new products or services could be of interest to you and the other chain actors?
8. Do you have any other comments or ideas you want to share?

Selecting the interviewees

The number of interviews to be conducted will depend on the homogeneity of actors along the market chain being surveyed. As a general rule, three to five actors involved in the same type of activity should be interviewed. If there are differences among similar actors involved in each activity then more interviews may be conducted to ensure that the views of all the different sub groups of actors are captured.

In addition, to increase the chances of active participation of strategic actors (for example, those close to final consumers, etc.) more interviews may be needed with this group. The following criteria are important when making up a list of people to interview:

- They should know the market chain and their activity well.
- They should be willing and able to improve the situation of the market chain.
- They should be interested in and open to the idea of collaborating and sharing information.

Conducting the interviews

Interviews should ideally be conducted by those staff members of the R&D organization who will act as facilitators in the thematic groups that will be formed later. The 20 to 40 interviewees may be split into groups in such a way that the interviews are conducted in parallel, so taking up less time. The interviews should follow four basic rules: listen, probe, observe and record!

The first two interviews should involve one or two actors already known to the interviewers, providing a means to test and become familiar with the guidance questions and ensure that the interviews do not last too long (see **Box T2**).

T2. Interview planning: time and place

Generally, survey interviews should not take more than 45 minutes, unless the interviewee is very motivated and eager to express his or her ideas! Whatever the case, care should be taken to ensure that the actors being interviewed do not become tired and lose their enthusiasm to answer, as this will negatively affect the outcome of the interview.

Ideally, to save the interviewees' time, the interview should be conducted in the actors' work environment. This will also provide the interviewer with the opportunity to gain a clearer idea about his or her situation related to the market chain.

In order to identify potential market opportunities, it is best to begin by surveying those actors closest to the consumers. Actors at the production end of the chain can then rapidly assess these opportunities mentioned in the interviews. The interviewed actors can always be asked to suggest other actors for inclusion in the survey.

In general, interviews should be personal and informal, in order to encourage interviewees to express fully their views and opinions. It is essential that the future facilitators understand the thinking and feelings of the different stakeholders, since this will enable them to focus the discussion on joint interests, so preventing conflicts. Interviewers should probe, and ask for clarification when an answer is either vague or inconsistent with previous replies given by the interviewee.

Probing should be done using neutral questions like "Could you explain what you mean by a 'good client'?" without leading the interviewee to a particular answer. Interesting comments made by interviewees should be recorded as quotes, word for word. In order to capture different viewpoints and interests related to certain issues, it is also important to "triangulate" information across actors (see **Box T3**)!

T3. Triangulating market chain information

The interviews should clarify the interests and the conflicts that exist among the various actors. It is important to understand and evaluate how views vary throughout the chain. The interviewer must accept that "reality" is relative, and depends to a great extent on viewpoint of the individual and the interests involved!

To verify how different issues are perceived by different actors, the interviewer should ask them the same questions. When doing this, the interviewer must be careful not to influence the response elicited, as he or she might already have a personal opinion on the topic under discussion.

Evaluating survey results

During each interview, the answers given should be recorded on the sheet of paper containing the guidance questions. Once all interviews have been completed, the interviewers should all sit together and synthesize the information gathered, in order to generate interesting insight and hypotheses for further discussion. The first rapid round of group reflection should focus on two main questions:

- Are there differences in the answers given by actors who engage in the **same** type of activity?
- Are there differences in answers given by actors who engage in **different** types of activities?

When reading through the interviews, outstanding comments made by interviewees should be recorded as quotes. This valuable information can then be used to underscore the findings of the survey with the actual words spoken by the market chain actors interviewed.

Step 2

Definition of thematic groups

The information obtained from the interviewees will provide an important overview of the current situation of the specific market chain being considered. At the same time, it will make the R&D organization using PMCA aware of existing or potential conflicts, and potential opportunities that could drive the participatory process. Based on these concrete ideas, thematic groups should be formed for the final event of Phase 1, in order to achieve the following objectives:

- To discuss concrete opportunities for collaboration in smaller groups, as this allows stakeholders to become actively involved based on real interest.
- To create an environment of trust where ideas and interests can be shared and confidence can be built, despite differences in views, interests and socio-economic backgrounds.
- To understand better the circumstances, practices, and needs of the actors involved in the targeted market chain.

Forming thematic groups

The thematic groups that are defined for the final event of Phase 1 play a key role in subsequent participatory PMCA work. Clear thinking is therefore required on the part of the leading R&D organization, to create groups that promote collaboration with market chain actors around potential market opportunities which have desirable development outcomes (see **Box T4**). To anticipate which market opportunities are most likely to have a positive impact on the poor or on rural development, for instance, a rapid *ex ante* assessment might be conducted before forming the thematic groups. Here the Impact Filter (see **Tool 1**) can help the R&D organization using PMCA to systematically assess how different market opportunities will influence specific development objectives.

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T4. Criteria for forming thematic groups

It is the R&D organization's responsibility to define the thematic groups that are most promising for the continuing participatory work. The following criteria should be considered when defining thematic groups:

- They must be derived from the interviewees' interests, as mentioned in the market chain survey.
- They must be broad enough to allow everyone involved to feel both comfortable and able to choose a group in which they can actively participate. However, they should not be too broad, to prevent overlaps between the groups.
- They must focus on opportunities that are not only promising for market chain actors, but which also have the potential to meet development goals such as impact on poverty, natural resource use, gender equity, etc.

Step 3

Holding the final event

The final event of Phase 1 brings all the market chain actors together for the first time. This event is the actual starting point for PMCA's participatory activities and allows the leading R&D organization to:

- Confront the interviewees and additional stakeholders with the results of the market chain survey.
- Discuss ideas and subjects of interest regarding collaboration related to concrete market opportunities.
- Motivate active involvement in thematic groups, which will continue during Phases 2 and 3.

Structuring the event in two parts

The final event of Phase 1 should have two parts: (1) the presentation and general discussion of the market chain findings, in plenary, and (2) work done in two or three thematic groups. To set up an attractive program for the event, both parts must be well and creatively planned, and responsibility for specific actions must be assigned to individual persons. The logistics will depend greatly upon the number of people invited to attend.

Plenary presentation and discussion

During the first part of the event, after a brief introduction, sufficient time should be used for the presentation and discussion of the market survey. Ideally, this presentation should be very visual; presenters should

bear in mind that most of the guests are not scientists! This presentation should conclude with suggestions for the thematic groups by the reading R&D organization, to allow participants to interact in smaller groups (see **Step 2**).

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Work in thematic groups

During the second part of the event, following a break, participants choose the thematic group they want to join. If groups are uneven, either in size or composition, facilitators may distribute participants more equally or merge groups. Whatever the case, each group facilitator should begin with an activity that allows the participants to present themselves to the others, mentioning who they are and what main interest drew them to participate in that particular thematic group (see **Box T5**).

Each person should write their main interest down on a card. Each card is then stuck on a board where a general market chain is drawn, such that each card indicates in what market chain activities the different actors are involved. In this way an initial overview is obtained, as it shows the market chain activities represented in the group and the main interests shared. Based on these joint interests, potential joint opportunities are discussed and missing actors are identified.

T5. Getting to know each other in the thematic groups

The facilitator asks each person to write on a card the main reason why he or she is participating. Participants take turns to state their names, the type of business they represent, and their motivation for joining this thematic group. During each person's introduction, the card stating the person's main interest is placed on a board on which a generic market chain has been drawn, showing all the activities from producers to consumers.

Once all the cards have been placed on the board, separated by the different activities of the market chain, the facilitator should evaluate the cards on the board on two things:

- "Which market chain activities are represented and which are not, and what interests do the different participants have?"
- "Which interests are most common and shared among the whole group?"

Potential use of a market chain sketch

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During the final event of Phase 1, the team of PMCA facilitators may perform a market chain sketch (see **Tool 2**), where they play the role of different market chain actors, bringing across in a visual way the core message of PMCA, which is that "market chain collaboration is essential to take advantage of new market opportunities." At the same time, such role-play also helps participants relax and creates a friendly environment that favors the exchange of ideas in the thematic groups during the second part of the event.

Such market chain sketches can be performed at the beginning of an event or after the plenary presentation, before the thematic group work starts.

Putting in place good facilitation

This first event requires a group effort on the part of the entire team of R&D staff implementing PMCA. Good facilitation is key to stimulating a positive attitude among participants which will encourage the sharing of interests and ideas. This is particularly important at this early stage in the PMCA process when there is still only a minimal level of trust among the participants. Thus, facilitators must be very careful when leading the discussions, placing participants in the role of experts rather than pushing their own opinions. It is important to ensure that every participant is given the chance to express him- or herself. Overall, such a "service attitude" is essential if positive values for interaction are to be established (see **Box T6**). Such values play a decisive role in motivating participants to actively participate in the thematic group meetings that take place during Phase 2!

T6. Cultivating positive values right from the start

Facilitators must be aware of the tremendous responsibility they carry with regard to setting a good example and establishing a fruitful culture of interaction. Whether or not the participants remain motivated to continue their involvement in the participatory process will depend strongly upon whether the thematic meetings are satisfactorily led, with beneficial interactions and tangible outcomes.

The need to generate tangible benefits for the participants implies that the facilitators must clearly understand that they are primarily servants in the PMCA process, and that the real experts

are the market chain actors themselves, as they live the experience every day! Such a service attitude, coupled with good facilitation skills, will build the leadership legitimacy needed to effectively lead the thematic groups at critical moments during the process, when the facilitator's guidance might play a crucial part in keeping the participatory work being undertaken on track.

Invitations to join the next phase

The event might close with a luncheon, to enhance informal interaction further and make participants feel comfortable with the idea of continuing to share their ideas with other market chain actors. At this moment, the PMCA facilitators should pass around a "subscription sheet", on which participants note their personal contact information and in what thematic group they want to participate during Phase 2. One person should be able to subscribe to more than one thematic group.

Later, the facilitators will then invite all those persons interested to come to their thematic group meetings in Phase 2, where market opportunities will be further discussed and analyzed.

Practical issues for Phase 1

- In contrast to other forms of market chain analysis, where the use of statistics is important, PMCA involves an interview-based approach which is much more qualitative. PMCA is not designed to obtain conclusive and statistically significant answers. Rather, it seeks to enhance "market chain understanding" for the R&D organization using PMCA, and to identify and interest key actors, so encouraging them to join a participatory process which allows their knowledge, interests, and ideas to be capitalized upon.
- Although PMCA imposes no time frame for Phase 1, ideally, the necessary interviews should be carried out within two to four months. This encourages those being interviewed to perceive the process as responding to their inputs, and creates awareness that PMCA produces "real" results, quickly!

PMCA Phase 2

Analyzing potential business opportunities

Objective of Phase 2

The objective of Phase 2 of the Participatory Market Chain Approach is to discuss and analyze market opportunities in each thematic group.

Structure and useful tools of Phase 2

During Phase 2, stakeholders continue their discussions and collaborative work in the different thematic groups, which were formed during the final event of Phase 1. To guarantee that there are sufficient active participants in each group, the facilitating R&D organization might want to merge smaller groups considering similar topics.

The activities undertaken in Phase 2 vary from case to case, depending on what type of innovations are proposed. This said, however, the following five generic steps provide guidance when structuring Phase 2 (see **Table 3**), particularly when thematic groups propose commercial innovations.

Table 3 Overview of the steps involved in Phase 2

Structure of Phase 2	Time frame	Useful activities and tools
Step 1. Providing relevant information to thematic groups	1 to 2 sessions	Special visits, presentation by outside experts
Step 2. Evaluating potential innovations	3 to 6 sessions	SWOT Analysis (see Box C9) Tool 1: Impact Filter Tool 3: Rapid Market Appraisal Tool 5: Focus Groups
Step 3. Outlining the opportunities analyzed	1 to 2 sessions	Tool 7: Business Plan
Step 4. Formulating a work plan	1 session	
Step 5. Planning and holding the final event of Phase 2	3 to 5 weeks	Tool 2: Market Chain Sketch

Step 1

Providing relevant information

The first step in Phase 2 should be to provide relevant information to each thematic group, thus allowing the R&D organization leading the process to:

- Give stakeholders baseline information pertinent to the group's interest.
- Get new actors involved and motivate them to actively participate in each thematic group.
- Enhance leadership legitimacy by responding to the interests expressed by the market chain actors.

Responding to information needs

After the first gathering in the final event of Phase 1, those stakeholders who wish to continue with the joint work will be eager to better understand the market opportunities previously discussed. Hence, in each thematic group, the PMCA facilitator should plan a first session when experts, from the group or outside, share their information with the group, either through formal presentations or informal reflections.

Choosing the presenters

Selecting these presenters needs care, as those not selected to present may feel excluded. Thus the facilitators should be very sensitive when deciding who should carry out this task. In general, those actors should be chosen whose input seems most relevant to the group and who are most likely to continue participating. Facilitators should ensure that the first meetings of Phase 2 lead to valuable and concrete outcomes, as this stimulates further participation (see **Box T7**). This is particularly important in the case of those (consumer-near) key actors who have little time available for such activities (i.e. those whose time involves the highest opportunity costs)!

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Organizing special visits

To enhance learning and create further benefits, the PMCA facilitators might organize special field visits with their thematic groups (see **Box T7**). Visiting production facilities of actors from the thematic group, and sharing "insider information" will enhance trust among group members. Visits can also be combined with the initial meetings of Phase 2. Why not try discussing potential market opportunities in a warehouse, barn or processing plant?

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T7. Ensuring benefits at each meeting

Because meetings represent an expense for participants (time is money!), the PMCA facilitators must make sure that every meeting benefits the participants, so that they are compensated for the cost of their participation. Benefits can consist of new contacts, relevant learning or simply an enriching exchange of ideas.

Ultimately, to ensure optimal stakeholder involvement in the PMCA process, facilitators must be creative and quick to spot opportunities that lead to tangible benefits for participants (such as product sampling during group meetings and special field visits, etc.).

Step 2 Evaluating potential innovations

Once the thematic groups have received a first "injection" of helpful information, it's time to begin the group discussions that will consolidate the shared interests of the group by analyzing potential joint innovations. These discussions lie at the heart of Phase 2 and enable the leading R&D organization to:

- Focus the discussion on market opportunities of joint interest, taking into account consumer demand.
- Empower market-near actors whose active and continuous involvement is key to the success of the process.
- Enhance mutual learning and trust building, both of which are driven by the identification of tangible "market solutions".

Thematic group session in a processing plant

Consolidating interests and ideas

If no consensus has yet been reached by the individual thematic groups regarding which innovations to target, additional group discussions will be needed. To prioritize one or two opportunities in each thematic group, it may be helpful to make a list of different options, then rate them using simple qualitative criteria, such as:

- Commercial viability
- Relevance for consumers
- Effect on poverty or rural development
- Feasibility of developing this opportunity as a group.

If such a rapid form of evaluation generates ambiguous results, the exercise could be enhanced by using the Impact Filter tool, which assesses expected impact in a more systematic manner (see **Tool 1**). Whatever the case, PMCA facilitators must carefully guide this important interaction, ensuring that those actors who know market demand best are given considerable room to express themselves – thus also preventing never-ending production-oriented discussions, which might discourage consumer-near actors from participating (see **Box T8**).

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T8. Giving room to consumer-near actors

There is a risk that certain actors – particularly producers, NGO workers and researchers – will tend to focus the discussion on production themes which they are most familiar with. To ensure that the group identifies opportunities with real market potential in the first place, those actors who are closest to consumers and who understand market demand best should contribute actively to the discussion.

Therefore it is important for the facilitator to actively encourage the participation of these key actors, the more so because they tend to be under-represented in the group because they bear the highest relative cost when participating (as they invest their time in activities with a clear pay-off). So, if attention is not paid to them and their interests, sooner or later they will cease to attend the meetings, putting the PMCA work at great risk!

Visualizing the market chain

In order to build a systematic understanding of the market chain among participants, each group's facilitator should try to visually present the market chain using drawings and other graphical media wherever possible. Such market chain drawings help to increase participants' awareness of the activities involved and the links that exist between the different actors and how potential market opportunities might affect them. In addition, the use of such visual aids is likely to raise further important questions and stimulate interesting new thoughts, provoking innovative ideas regarding the design of new creative business options. If well done, such aids can serve as illustrative references for further discussions, and help new participants catch up with the group in understanding where the weak links are in the chain and how innovations might improve the situation.

Systematic analysis of options

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Once the thematic group has decided which market opportunities to focus on, the facilitator might want to use the SWOT-Analysis (see **Box C9**) to assess, in a participatory manner, the potential strengths, weaknesses, opportunities and threats associated with each innovation.

Without doubt, this SWOT exercise will provide an important first insight into the market potential and feasibility of a proposed innovation. At the same time, it will also reveal what information gaps still exist.

Filling information gaps

In some cases, the information gaps revealed can be easily filled through further group discussions. In other cases, however, the missing information might require new actors to be integrated into the thematic groups. Or, special research efforts might be needed, especially when information concerning consumer behavior and market structure is necessary. Rapid Market Appraisal (see **Tool 3**) and Focus Groups (see **Tool 5**) could prove helpful when trying to collect information on such subjects.

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C9. Outline of a SWOT-Analysis

The **SWOT Analysis** is an effective tool for identifying the **Strengths (S)** and **Weaknesses (W)**, and the **Opportunities (O)** and **Threats (T)** related to a business option. When used in a participatory setting, such as PMCA, it is useful to work with cards, which stakeholders can use to summarize their observations. Pinned on the wall or laid on the floor, these cards stimulate a lively discussion which can be used to validate the information gathered within the group. The following questions, given for guidance, will help to ensure that the maximum benefit is obtained from a discussion of a specific market opportunity:

Strengths

- What advantages does the market opportunity have?
- What are your strengths as a group?
- What relevant resources do you have access to?

Weaknesses

- What weaknesses does the market opportunity have?
- What, as a group, might you not be able to do so well?
- What are the key areas that need attention to avoid failure?

Opportunities

- What changes in technology, markets, policy, and social and lifestyle patterns tend to favor the market opportunity?
- What interesting trends are you aware of?

Threats

- What obstacles do you face that are outside your control?
- What are competing products and competitors doing better?
- Might you face cash-flow problems?
- Could any of your weaknesses put in danger the success of your market opportunity?

Linking with marketing specialists

To ensure that no time is lost in the process, the facilitating R&D organization might hire consultants to feed market-related information into the PMCA process, thus enabling the thematic groups to make better decisions. However, when doing so, the facilitators involved must carefully coordinate this work, as participating stakeholders must be involved in planning the outsourcing of these activities and have the chance to comment on the progress of the work being undertaken by the expert. The facilitator has the difficult task

of acting as the best possible interface between the group and the consultant (see **Box T9**).

Collaboration with consultants is especially important when conducting a Quantitative Market Study (see **Tool 4**), to assess market size and profitability of a specific business opportunity, as special skills are required to obtain good results. In any case, if the time and the necessary expertise are available in the group, the more qualitative forms of market research should be done either by the facilitator, or by "neutral" members of the group. This knowledge gained will improve decision making throughout the PMCA process.

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T9. Managing consultants

To improve decision-making, it is important to have access to consultants who can support the thematic group work with special (marketing) expertise. However, supervision might be difficult, since such consultants often avoid participatory processes which involve many opinions!

Thus, it is essential that the PMCA facilitators clarify how these consultants are supervised and what mechanisms should be in place to ensure that participants get the chance to comment on the consultants' work.

Is it desirable to confront a consultant with the thematic group's opinions? On the one hand, such confrontation could stimulate an enriching discussion; on the other hand, it might hinder active commentary and generate frustration, as "unprofessional" critiques could hurt the consultant's feelings.

Step 3

Outlining the opportunities analyzed

Once the most promising market opportunities have been analyzed, each thematic group should outline the main ideas underlying the innovations that should be put into practice during Phase 3. Such outlines will help the R&D organization to:

- Gather the most relevant information.
- Bring about consensus among the group regarding the most promising market opportunities.
- Prepare a document that clearly communicates the ideas which have been agreed upon regarding the market opportunities to be implemented in Phase 3.

Consolidating ideas within the group

A special session might be needed to pull together different pieces of information and agree on the characteristics of the market opportunities proposed.
In order to make sure that the discussion covers all the different aspects of the market opportunity, the facilitator might use a checklist containing all the elements to be considered. An important point of reference is provided by the Business Plan (see **Tool 7**), which specifies essential elements for commercial products, but which can also be used to guide the discussion about technologies or public goods that the group intends to develop (e.g. websites and other information material for the public). The Business Plan forces participants to think carefully about the "target population" and "product positioning", etc.

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To prevent misunderstandings during this important session, PMCA facilitators should synthesize (on a whiteboard or flipchart) the consensus reached by the group concerning the different aspects of the market opportunity discussed.

Writing a concise summary

Once the group's ideas about their market opportunities have been consolidated, it is worth writing a concise text that brings all this information together. Again, the Business Plan (see **Tool 7**) should provide you with a good idea of how this can be done practically.

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When this text is shared among the group members, it will help to internalize the group's ideas and stimulate a stronger group identity – as it communicates to outsiders what the group has in mind. In this sense, it is a valuable piece of work both for the final event of Phase 2 (during which the thematic group work is presented) and for Phase 3 (during which it will serve as a guiding document for the implementation of innovations).

Step 4

Formulating a work plan

In order to define what joint work should be undertaken in Phase 3, we recommend that each thematic group prepares a work plan. This will allow the R&D organization to:

- Plan how the work undertaken in Phase 3 will be implemented.
- Specify what support the group will need during Phase 3.
- Identify what new actors should be invited to participate in the final event of Phase 2 (in order to bring them "on board" for Phase 3).

Creating a "to do" list

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Since market opportunities were outlined in a previous discussion (see **Step 3**), it should be easy for each group to come up with a work plan for Phase 3. This work plan should take the form of a "to do" list, in which specific tasks are scheduled and assigned to actors. These actors should take the lead and ensure the implementation of their assigned task. Whatever the case, the list must be constructed in a participatory manner: care must be taken to ensure that both those assigned and those not assigned to the list agree upon its content!

Identifying needs and new actors

The development of this work plan should allow each thematic group to identify their needs for special support and the key actors to be involved in Phase 3. Possible strategies to meet these needs should be discussed, as the final event of Phase 2 provides an excellent opportunity to involve new actors. As a consequence, the group facilitators must make sure that each thematic group's needs are taken into account when this event is planned.

Step 5

Holding the final event of Phase 2

The final event of Phase 2 is the second event which a larger audience is invited to attend. This event allows the lead R&D organization to:

- Create an opportunity for new key actors to learn about PMCA activities, thus motivating them to join the implementation process undertaken in Phase 3.
- Give the thematic groups the opportunity to present their work and request specific support to enhance their work.

- Empower market chain actors who have actively participated in the PMCA process and who are most relevant to the future success of the innovations being undertaken.

Responding to the groups' needs

The overall planning of the final event of Phase 2 is in the hands of the R&D staff facilitating the PMCA process. They will arrange the overall program and send out the invitations. Nonetheless, as the main objective of this event is to allow the thematic groups to demonstrate their progress, outline the market opportunities they have identified, and present their work plans for Phase 3, the thematic groups themselves should be strongly involved in the planning of the event or, at the very least, their needs must be taken into account. First, the thematic groups should put forward the names of the new stakeholders they feel should be invited, to strengthen the group (see **Box T10**); second, each group should indicate how much time they require for their group presentation.

T10. Involving new key actors in the PMCA process

The final event of Phase 2 provides an excellent opportunity to involve new stakeholders. One option is to simply ask them to attend the event, in the hope that they will assist and become excited about the concrete ideas presented by the thematic groups.

Another option is to invite them to attend as special guests or speakers, giving them the opportunity to present their work and ideas which provides a particularly strong incentive for them to attend. As these new actors and the thematic groups share their work, interests, ideas and future plans, it is likely that this first contact will lead to a fruitful collaboration right away that will bear fruit, during Phase 3 and later on!

Setting up a sound event program

The R&D organization facilitating the process should plan this event creatively and bring across PMCA's spirit of innovation!

It might be appropriate to divide this event into two parts. During the first part, the thematic groups could be given the opportunity to present their work visually

using a presentation software (e.g. PowerPoint). This would be followed by a break. The second part of the event could consist of presentations by special guests who would consider a "hot" topic specifically related to PMCA's work. Alternatively, the second part could take the form of a fair with different stands, which would allow different actors and thematic groups to exhibit their ideas or product prototypes to those attending. The latter option tends to encourage more lively interaction among the "old" and "new" PMCA participants.

Closing the event with a tasty luncheon is a good idea as it will foster further interaction among actors – particularly when some of the thematic groups have developed new products or recipes that can be tasted during the meal!

Empowering key actors

Each thematic group should decide who should represent the group when the joint work is presented to the plenary. Ideally, in order to empower different stakeholders, three to five actors from each group should share this responsibility. It is important for the R&D organization facilitating the process to make these actors more 'visible' (see **Box T11**).

T11. Helping key actors gain visibility

The facilitators of each thematic group may suggest which individuals could represent their group at this event. Thus, they might propose those individuals who have participated most, or those who have played a key role in the group. This said, however, it is best if the responsibility of nominating the presenters is actually shouldered by the group itself, as group discussion will avoid a unilateral decision which might otherwise generate mistrust in the group.

The fact is that the thematic group will always empower those people who have, in the eyes of those involved, demonstrated that they perform well, are capable and merit trust. In this sense, the group will most probably choose its own future leaders: actors who will play a key role in implementing the suggested innovations, after gaining essential leadership legitimacy via the PMCA's group interactions.

Practical issues for Phase 2

- How long Phase 2 will last will vary from case to case. Overall, its length will depend on how frequently each thematic group meets and how many meetings are needed to formulate a sound work plan. Ideally, the facilitators should ensure that this goal is achieved within the space of 7 to 10 thematic group meetings, and within no more than 4 to 5 months, in order to keep participants motivated based on visible progress.
- To ensure that each meeting proceeds smoothly, it is necessary for facilitators to prepare for each meeting thoroughly, setting up an agenda that guides the discussion toward those issues that most urgently need to be discussed.
- During each meeting, a whiteboard or flip chart should be used to track the decisions made during group discussions. This will reinforce the group's awareness of the commitments made and will help to ensure that the summary of each meeting, which should later be circulated by e-mail or mail, will reflect what was discussed and agreed on. This is a key point, because misinterpretation can badly damage the image of facilitators and harm their leadership legitimacy, endangering participation and the PMCA process as a whole.
- To strengthen the thematic group, the facilitators should be proactive in encouraging the participants to invite new, potentially useful, actors to the group meetings. The facilitator must make sure that such newcomers are well received and feel comfortable right away, ensuring their involvement in group discussions.

PMCA Phase 3

Implementing joint market chain innovations

Objective of Phase 3

Phase 3 of the Participatory Market Chain Approach aims to put into practice the work plan formulated in Phase 2, developing the potential innovations proposed by each thematic group. These innovations are then presented at a large final event to a wider public.

Structure and useful tools of Phase 3

The activities undertaken during Phase 3 will vary from case to case, as each PMCA application will be different and each thematic group will have a specific work plan. Consequently, the generic steps involved in this phase (see **Table 4**) need to be filled with case-specific, practical content to turn ideas for innovation into commercially viable propositions.

Table 4 Overview of steps involved in Phase 3

Structure of Phase 3	Time frame	Useful activities and tools
Step 1. Getting thematic group organized	1 session	
Step 2. Getting innovations designed	5 to 10 sessions	Tool 5: Focus Groups Tool 6: Marketing Concept Development Tool 7: Business Plan
Step 3. Planing and holding PMCA's final event	2 to 3 sessions	Visual presentation of innovations

Step 1

Getting thematic groups organized

A successful final event of Phase 2 will motivate participants to continue working together. Even more so if new actors join the process at this stage, thus confirming that the thematic groups are on the right track! To ensure that Phase 3 begins well, each thematic group should organize itself and aim to:

- Integrate new participants.
- Adjust the previously formulated work plan for Phase 3.
- Plan and coordinate the different group activities that are proposed.

Clarifying activities and roles

Taking into account the observations and comments made at the final event of Phase 2, each thematic group should discuss potential adjustments to the work plan. Since new actors might be present, each activity should be briefly re-discussed, clarifying how it will be undertaken and who will be responsible.

Wherever possible, group facilitators should try to hand over responsibilities to key actors, so the empowerment process can proceed more quickly and allow key actors to prove their abilities and the fact that they can be trusted (see **Box T12**).

T12. Gradually handing responsibilities over

Ultimately, the R&D organization should not be the owner of the market chain innovations generated through PMCA. For this reason, the group facilitators must give key actors the opportunity to take on responsibilities, and prove that they can act in the best interests of the group – and not just in their own best interests. If they can achieve this, they will be granted leadership legitimacy, which will empower them.

To ensure that this happens, it is essential that facilitators diminish their own leadership power. This is not easy, but it is fundamental to the process: sustainability will only be achieved once PMCA facilitators are no longer needed!

Step 2

Getting innovations designed

The process of designing the earlier discussed innovations will take up most of Phase 3. For the R&D organization, this step is essential to:

- Transform the proposed innovations into tangible products, technologies and institutions, all explicitly responding to (market) demand.
- Shape these innovations in such a way that their characteristics and design effectively communicate their value to potential users.

Developing sound marketing concepts

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The outline formulated for each market opportunity in Phase 2 (see **Step 3**) is the starting point for further analyzing the proposed innovations (i.e. the factors that characterize and differentiate them), and shaping marketing concepts around them (see **Box C10**).

C10. Marketing concepts

A **marketing concept** refers to a set of different characteristics which, taken together, provide a coherent identity for a product or service.

The development of a sound marketing concept implies conceptual work, to combine in a coherent manner characteristics that are valuable to a specific group of consumers and effectively communicate the product's overall design including the following aspects:

- What is the purpose of the product or service
- Why it is different from, and better than, other products
- Who should consume it
- What can be expected from its use

Remark: A sound marketing concept reflects exactly what the product is really offering. It never oversells a product, since this would only frustrate consumers and ultimately harm the product's reputation and success in the market!

Although marketing concepts relate mainly to commercial innovations, we strongly recommend that "marketing concept thinking" is also used when designing technological and institutional innovations. The fact is that technologies and institutions, to be successful, must also be targeted specifically at those users who will benefit from their use!

Helpful R&D tools

The way in which marketing concepts are consolidated varies from one case to another. In some cases, the marketing concept might be determined purely by the thematic group; in other cases, further market research may be needed to better understand consumers' views and identify the relevant features of the product. In either case, the Focus Group tool (see **Tool 5**) will prove helpful to those organizing structured discussions to determine a marketing concept. Focus Groups can be used at two different stages of the marketing concept development process:

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- Before starting the design work – to clarify the main product features or elements of the marketing concept.
- When prototype products exist – to validate the marketing concept and its visualization through the product's design.

Because the market concept development work is a key aspect when designing viable innovations, an explicit Marketing Concept Development tool is included in this user guide (see **Tool 6**). The Business Plan (see **Tool 7**) might also be helpful at this stage of shaping innovations, as it outlines important considerations for putting a market opportunity into practice.

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Accessing professional support

To ensure that the innovations being produced are designed professionally, external experts with specific skills might be brought in. So, for instance, commercial products might need graphic designers (to create labels, etc.), while technologies might need engineers (to develop machinery, etc.) and institutional innovations might require the use of lawyers (to define statutes, etc.).

When such specialists are employed, clear terms of references (TORs) will be important as part of a service contract that allows outsourced work to feed directly into the work being conducted by the thematic groups (see **Box T9**). To ensure that the thematic groups remain motivated when work is done by "outsiders", facilita-

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tors must make progress visible to their groups (see **Box T13**). If the implementation activities are led by group members, facilitators must insist that these members present their work to the whole group.

T13. Capitalizing on visual progress

Trust increases when words are transformed into deeds.
Participants will begin to doubt the practical potential of PMCA if they do not see real progress being made. Seeing is believing!

Hence, the facilitator must take advantage of all available opportunities to make progress visible. Preliminary designs for packages or labels, for instance, can be real motivators. And, it should be remembered that seeing progress is the best way to continue making progress!

Clarifying roles and strategies

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Although roles and strategies were discussed earlier (see **Step 4**, in Phase 2), these issues need to be revisited, specifying ownership, commitments (e.g. in terms of investment and promotion activities) and the group's strategies for product launches. Such discussion might not be easy – depending on the prevailing, possibly differing (expressed or non-expressed) interests within the group. Nevertheless, in order to enhance trust, this transparent negotiation remains fundamental to the success of the process (see **Box T14**).

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Building of a potato grader in Lima, Peru

T14. Managing tricky transparency discussions

In poker, when much is at stake, participants tend to hide their cards. But, PMCA is not a game of poker. To ensure that all participants are on the winning side, facilitators must "play" with the highest level of transparency. This will allow the PMCA facilitator to develop the necessary leadership legitimacy needed to guide difficult discussions, when interests need to be clarified or conflicts resolved.

In Phase 3, for an innovation to become a commercial reality, market chain actors need to make investments and expect an appropriate return. PMCA facilitators need to ensure that the group deals with the following aspects:

- Who will be the owner of products and brand names?
- Who will co-invest in production, processing, and promotion?
- What commitments are entailed for the different market chain actors?
- What type of support is expected from the R&D organization?

The conclusions reached during such discussions should be written down and progressively integrated into a Business Plan (see Tool 7).

When PMCA is applied in the context of poverty alleviation or the promotion of rural development, "corporate social responsibility" (see **Box C11**) should be part of the group discussions, and mechanisms sought to make the contributions of the private sector in these areas visible to the public (e.g. the creating of special labels). Such mechanisms enhance communication of social benefits to the public, and consolidate collaboration between poor producers, private enterprises and R&D organizations. For instance, effective communication via the Internet, newsletters, product labels etc., are important ways of communicating this concept to consumers and can contribute to product differentiation and eventually higher prices.

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C11. Corporate social responsibility

"Corporate social responsibility" is a new business concept that expresses a company's wish or obligation to be sensitive to the needs of "all" stakeholders involved in its business operations. The principle is closely linked to the imperative of ensuring that these operations are "sustainable", taking into account not only the financial/economic dimensions but also the social and environmental consequences.

There are many ways of reporting activities related to corporate social responsibility. It is, however, important to ensure that all activities, and the social impacts that result, are reported in a transparent way. Nowadays, the Internet presents interesting options for this, with the potential of linking webpages to product labeling.

Source: adapted from http://en.wikipedia.org

Step 3

Holding PMCA's final event

Planning for the third and final event of the PMCA process should begin when the thematic groups are in the final stages of designing their innovations. Since the PMCA process "officially" ends with this large final event, it is of great importance to the facilitating R&D organization, providing an opportunity to:

- Present the joint innovations resulting from the process to the wider public while clearly communicating that the market chain actors are the "real" owners of all innovations.
- Create an optimal environment for key actors to launch the innovations successfully in the market.
- Gain public recognition for the work achieved with PMCA.

Thinking big and strategically

Overall, this final large event should lay the best possible foundations for the future success of all the innovations derived from the PMCA process. It is especially important to use "aggressive" communication (e.g. producing leaflets, making press releases and giving interviews to the media) when commercial innovations are generated. Unlike previous PMCA events, this final event should attract journalists, to foster the diffusion of PMCA's results. Therefore, the leading R&D organization must create tangible incentives for the mass media to attend. Such incentives should include:

- The sending out of personal invitations together with a press release that provides information about the event and the market chain innovations that have been generated and will be made public that day.
- The presence of one or two "media-attractive VIPs", who will discuss the PMCA's work and its achievements (see **Box T15**).
- A special reception for the media, including an aperitif and a "gift basket" with detailed information about achievements and samples of products developed during the PMCA process.

T15. Attracting one or two "big shots"

The presence of one or two attractive personalities from the government or private sector is an important "hook" to generate media interest in the PMCA's final event. These special guests help the PMCA participants to gain the self-confidence needed to continue their work after the final event has ended.

To ensure that these VIPs don't "steal the show with their own agenda", it is wise to ask them to comment on the PMCA's accomplishments as part of the event program. This will ensure that the journalists attending will learn more about PMCA and its outcomes, which will in turn improve media coverage!

Visual presentation of innovations

To enhance the media's interest in covering this event and encourage key actors to take the innovations produced further, market chain actors should personally present their achievements. This can best be done using a "market chain setting", where different PMCA participants, representing their business, are lined up according to their activities, from production to consumption (see **Box T16**). This visual representation is attractive to media representatives and communicates effectively PMCA's main message that "collaboration along the chain is the key for success" and reinforces the perception that the market chain actors are the owners of all the PMCA innovations produced. This perception of ownership is further consolidated when the media interviews the market chain actors taking part!

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T16. Visualizing innovations in a real market chain setting

Those planning the final event should look for visual and creative ways of portraying the main messages and achievements of the PMCA process. One attractive option is to present the innovations in a "living chain", where different PMCA participants represent their specific activities: production, processing, wholesaling, distribution, etc. Actors can sit or stand on a long table; alternatively exhibition booths can be laid out in a larger area, where visitors move from one booth to another along a virtual market chain.

In both scenarios, actors from each part of the chain explain their situation, the relevance of the innovations they have developed and the role of PMCA in enhancing collaboration. Careful planning and prior rehearsal is necessary, to ensure that the key messages are transmitted clearly and concisely!

Planning and team work

Because the final event of PMCA may involve far more than 100 invited guests – and will include all the members of the thematic groups, important players in the sector, politicians and representatives of the media – the R&D organization must ensure that the event is carefully planned. The delivery and follow-up of invitations, as well as the planning of the event's activities, must be coordinated with the thematic groups. Specific aspects that require advance planning include:

- The planning of the event – i.e. the structure of the activities and who is responsible for them.
- The invitation list – which should include PMCA participants, other people related to the sector, politicians, and the media.
- Logistics – including room reservations, and the provision of audio equipment, decorations, food, security, etc.
- The provision of information – which should include a folder with information about the project and its innovations, etc.
- The provision of special gifts – i.e. the products that resulted from the PMCA process, etc.

Setting up a sound program

The most efficient way to organize this final event is to form a coordination team, which should consist of the PMCA facilitators, a few participants from the different thematic groups and additional staff able to provide logistical support.

The event can be divided into two parts as suggested for the final event of Phase 2 (see **Step 5** in Phase 2). The first half of the event might involve the thematic groups presenting their work and achievements in an auditorium; the second part could then be run in a more creative setting with market chain innovations presented visually by the PMCA participants themselves (see **Box T16**). Because journalists are pressed for time, it might be efficient to welcome them separately, so that they only attend the second part of the event, when innovations are presented and VIPs share their views and ideas about PMCA and its achievements (see **Box T15**).

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If sufficient funds are available, a luncheon nicely closes the event to celebrate PMCA's joint achievements. Novel dishes, cultural dances, and other creative presentations add a special touch to this occasion.

Securing internal institutional support

The size of the large final event, coupled with the amount of exposure required, demands a strong commitment from the R&D organization. Its directors must be aware of this event and the impact it could have. Ideally, directors should attend the event, in order to build new alliances with actors present; events of this type provide excellent opportunities for production focused R&D organizations to make new contacts, with businesspeople, managers of public sector organizations and politicians, all of whom might be interested in collaborating in other areas.

Practical issues for Phase 3

- The length of Phase 3 depends on the amount of work that needs to be done to bring to fruition the different innovations proposed. The time frame for Phase 3 should not exceed 6 months, to ensure that active participation does not decrease because the participants cannot see an end to the PMCA process.
- If needed, the process should be reinforced by making use of competent external professionals. This said, however, a good level of coordination must be established between the outside professional and the thematic groups, to ensure that their work feeds into the thematic group meetings. To provide optimal backstopping to consultants, facilitators might request technical support and guidance from their colleagues.
- Since PMCA requires a high level of organizational commitment (particularly with regard to the final event), facilitators should ensure that their directors are informed from an early stage about the project's progress, and preferably involved in PMCA activities. The final events of Phase 1 and 2 provide excellent opportunities to do this, as such key figures can be engaged by giving them special tasks, e.g. opening the workshop.

Making PMCA innovations public at the final event

Follow-up: Consolidation of innovations

Defining a new role for the R&D organization

PMCA ends with the final large event of Phase 3. At this point, full responsibility for the innovations created is transferred to the market chain actors, who must take the reins and capitalize on them in the "real world". At the same time, the R&D organization which facilitated the PMCA process must distance itself from any commercial responsibility.

This, however, does not mean that the R&D organization cannot continue to provide support. On the contrary, in most cases follow-up activities will be essential, though they must be conducted within a new institutional setting, where the R&D organization responds to specific demands from partners. Thus, the R&D organization should plan its new interventions very carefully, so it confirms and does not question the market chain actors' ownership of the innovations obtained! In this sense, the R&D organization's new role must be one of a service provider, responding only to demands made by the market chain actors.

Providing different types of support

The type of support required from the R&D organization will depend on the specific needs that arise at the end of each PMCA application. In general, market chain actors dealing with institutional and technological innovations might require more support to help consolidate and diffuse those innovations, while commercial innovations might require only short-term support (see **Box T17**).

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Last technical evaluation of potato grader

T17. Consolidation of PMCA innovations

Potential support for **institutional innovations**:

- New organizations, such as associations, require substantial support at start up to function properly.
- The implementation of new ways of cooperation, such as contract farming, might require professional assistance to consolidate the partnerships involved.
- The definition of "new rules of the game", such as norms for product quality, might require further capacity building.

Potential support for **technological innovations**:

- New technologies generated through PMCA might require further adjustment to optimize their use in practice.
- The adoption of technologies might imply investments in extension, for example, to guarantee optimal uptake by small-scale producers.

Potential support for **commercial innovations**:

- Solving or optimization of technical aspects of the product's elaboration process.
- Assistance with product promotion and public awareness during the market launch of products .
- Fostering of the developed products uptake with additional market studies and help in improving marketing concepts.

Presentation of culinary innovations with "tunta" to the media

Being careful with subsidies

When backing commercial activities, an R&D organization needs to be careful in using public funds that benefit the private sector. Subsidies must be carefully evaluated and are only justified if they also contribute to social or environmental goals, directly or indirectly. The use of subsidies should be made explicit (see **Box T18**).

T18. Subsidizing the private sector

In economics, subsidies are defined as monetary grants given by governments and non-profit organizations to the private sector, in order to promote activities that are in the interest of the public. In other words, subsidies provide an incentive for the production of public goods and cover part of their costs.

In R&D work, subsidies are an interesting mechanism which can be used to encourage private companies to develop activities that will benefit the public. Examples include the commercialization of products which will have a positive impact on the poor and on natural resource conservation, etc. In practice, the challenge is to measure the public benefits derived from such subsidies, in order to justify them on a case-by-case basis. If such public investments mainly benefit private companies, subsidies distort the competition in the market and are a waste of public funds. Such a situation must be avoided!

Building capacity for new opportunities

A special concern of PMCA follow-up activities relates to capacity development. Since the innovations developed during PMCA imply changes in the way that things are done, learning must continue to support the innovation process and make changes sustainable.

Capacity building might be needed at different levels of the market chain – to address specific bottlenecks in production, storage, processing, commercialization and consumption. Capacity building is particularly necessary in critical areas that require concerted action across the market chain, for example with production quality, technology use and developing associated organizations (see **Box T19**).

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T19. Capacity building

Capacity building is an integral part of PMCA's three-phase process, as a lot of learning takes place during thematic group meetings. However, when PMCA is used for rural development and poverty alleviation, this approach falls short of constructively building the necessary capacity at the production level. Instead, this must be achieved after the PMCA process has ended. There are several good reasons for this:

- The innovations developed through the PMCA process clearly point to the areas in which capacity building is needed.
- If the organization of farmers is a central goal of capacity building, PMCA innovations will be important drivers that encourage farmers to move in this direction.
- When PMCA ends, the R&D organization in charge of farmer training will have a broader perspective and so will be able to focus more on market demand when undertaking the work.
- The PMCA process will generate different types of partnerships, which can also be used to upgrade the training provided to farmers.

Capitalizing on new contacts

p. 4

Once the PMCA process has ended, the R&D organization should follow up certain activities to maintain the good contacts that have been established. If the different new relationships are not used, the new social capital will diminish and could be lost (see **Box C1**). From the perspective of the R&D organization, it is especially interesting to invest in collaborative activities with complementary partners that have different goals and resources. In such partnerships, extraordinary results can be expected, where trust built with PMCA catalyzes new initiatives (i.e. through low transaction costs). In the long term, this collaboration process builds social capital that favor cooperation between all the actors involved and enhances the competitiveness of the market chain and the rural areas linked to it.

Useful tools for PMCA

"Good tools that are not applied correctly are useless."

Content of this chapter

This chapter describes seven different tools that could prove helpful when planning and implementing activities as part of the PMCA process.

Introduction

A methodological Swiss Army knife

PMCA is designed to be adaptable, so that it can be used in the context of different market chains. It is the facilitator's task to convert the three phases of PMCA into a set of activities that allow the objectives of each phase to be achieved (see **Figure 7**). During this process of defining, analyzing and setting in place new market opportunities, different tools might be useful to improve the quality of the work done at each stage.

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New guidance using old tools

The tools presented here provide practical guidance for different aspects of the PMCA process. Most of them are not new; rather they are existing tools with the potential to increase the quality of PMCA activities undertaken at different stages during the process (see **Table 1**).

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Step by step

How many times have we blamed a tool for not working properly because we weren't using it correctly? To enhance your understanding of when each tool should be used and how, each is outlined in detail with the individual steps involved.

Helpful in different situations

The tools presented in this chapter are not only relevant for the work done with PMCA. On the contrary, we very much hope that these tools are also helpful to guide other types of R&D activities as well. You must decide what tool to use when and for what purpose!

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Tool 1 Impact Filter

The Impact Filter allows a qualitative evaluation of expected impacts that result from different market opportunities, including the impact on poverty and social and environmental objectives.

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Tool 2 Market Chain Sketch

The Market Chain Sketch is an amusing role play performed by R&D staff as part of a workshop or large event. It is used to illustrate the need for better collaboration throughout a specific market chain.

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Tool 3 Rapid Market Appraisal

The Rapid Market Appraisal provides a way of quickly assessing a specific market in order to determine the commercial potential of new products or market opportunities.

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Tool 4 Quantitative Market Study

The Quantitative Market Study is used to measure the market potential and size of a specific business proposal.

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Tool 5 Focus Groups

Focus Groups help to evaluate and shape products and services through structured group discussions involving six to eight target consumers.

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Tool 6 Marketing Concept Development

Marketing Concept Development allows one to determine, evaluate, prioritize and visualize those elements that are valuable in the eyes of target consumers.

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Tool 7 Business Plan

The Business Plan is a strategic document that briefly describes all aspects of a proposed market opportunity.

Tool 1

Impact Filter

André Devaux, Thomas Bernet

Overview

When:	Phases 1 & 2
Who:	Facilitators
Preparation:	1/2 day
Duration:	1 day

Brief description

The Impact Filter provides a rapid qualitative evaluation of the expected impact that different market opportunities are likely to have on poverty, and on social and environmental objectives.

Purpose

The Impact Filter is a tool that enables R&D organizations to plan and guide interventions more effectively. This allows them to promote those market opportunities that promise to have the most positive impact. The tool explicitly takes into account the following dimensions of impact (see **Application A1**):

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- Economic-poverty reduction and income risk
- Social-empowerment and gender
- Environmental-natural resource management.

The Impact Filter can be used in the context of a project to define areas of action and supporting interventions. Being a rapid, qualitative tool, it can also be applied in participatory processes. In the latter case, actors with different professional backgrounds and experiences would jointly evaluate the potential impact of different market opportunities.

Use in PMCA

When used as part of PMCA, the Impact Filter allows the facilitating R&D organization to take strategic decisions. The participatory process can be guided in such a way that it addresses those innovations that promise

best impact with regard to the different impact dimensions mentioned above. In the context of PMCA, the Impact Filter may be used in Phase 1, to form thematic groups, or in Phase 2, as part of the thematic group discussions, to focus the group's activities on those potential innovations that are most likely to produce the desired development impact.

Step 1

Developing a simple evaluation chart

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The first step is to identify the different market opportunities to be evaluated. A matrix is prepared to characterize the different products according to qualitative criteria, such as market size, target population, production zones, etc. (see **Table 5**).

Step 2

Defining development ojectives

To compare the impact of the selected market opportunities in more detail, a more complete chart is developed. This chart is used to evaluate targeted development objectives which interventions should achieve (e.g. poverty alleviation, empowerment of small producers, sustainable use of natural resources, etc.). This finer grained analysis of impact is achieved by attributing sub-criteria to each of the three general objectives: economic, social and environmental (see **Table 6**).

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Step 3

Weighting of general and specific objectives

To ensure that each overall objective and its sub-criteria are assigned the correct level of importance, these criteria are weighted in two steps (see **Table 6**):

1. Weighting of each general objective: the relative importance of each overall objective is defined by assigning a percentage representing its respective "weight" (total sum = 100%).
2. Weighting of each sub-criterion: the relative importance of each sub-criterion is defined by assigning a percentage that represents its relative weight at the level of each general objective (total sum = 100%).

Step 4

Rating different market opportunities

To determine which market opportunity would contribute best to the development objectives, each opportunity is evaluated: each sub-criterion is rated by assigning it a number ranging from 1 to 10 using the following approximate scale:

- 1 = "impact is very negative"
- 5 = "impact is neutral"
- 10 = "impact is very positive".

The process used to obtain this rating may vary from case to case, depending on whether this tool is used in a participatory setting or not (see **Box T20**).

T20. Designing the evaluation process

A potential impact can be evaluated in different ways. One way is to evaluate it by working in a small team made up of people who know the sector well – both in terms of production and the market. Such an assessment could be done jointly or individually. If done individually, average values would be derived from individual assessments.

Another way is to undertake the evaluation within a bigger group, as part of a participatory process where different market chain actors are involved. In this case, however, it will be important to consider the fact that personal, institutional and commercial interests may distort the process.

Step 5

Calculating potential impact

For each business option, coefficients are calculated for each sub-criterion by multiplying A x B x C where:

- A = Weighting factor of general objective (%)
- B = Weighting factor of sub-criterion (%)
- C = Rating of impact at the sub-criterion level (1-10).

To compare the overall expected impact across market opportunities, the coefficients calculated for each sub-criteria are totaled for each case (see **Table 6**).

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Step 6

Interpreting the results

In order to consider the results as fully as possible, it is recommended that you discuss and interpret the outcome as a team.

If the evaluation chart is prepared using average values obtained from individual evaluations, it will be

interesting to discuss both the final results and the differences obvious among the individual evaluations. The latter will allow you to discuss if and why there is consensus among evaluators, or, if consensus was lacking, why that was the case. In certain cases, it might be necessary to readjust the evaluation chart, as certain impact sub-criteria may not be clear enough.

Step 7

Drawing sound conclusions

Which market opportunities should be prioritized is obviously a decision that will depend on the final score in each application.

Nevertheless, it will also be important to consider other issues that have not already been taken into account, particularly if the assessed market opportunities receive similar scores. So, for example, certain market chain opportunities might better capitalize on assets that are already available (e.g. market information, production know-how and business contacts, etc.).

Strategic issues might also be of relevance. So, for example, the R&D organization using this tool might want to support a business that generates specific skills that are of strategic interest to the organization; or, it might be concluded that it would not be wise to focus on an export market without first launching the product in the domestic market.

Considerations when adapting the tool

The Impact Filter is flexible. As a tool, it can be adjusted to any context in which an impact assessment is relevant, either *ex ante* (i.e. assessing potential impact prior to interventions) or *ex post* (i.e. assessing the outcome of completed interventions). In either case, when adapting the tool, those using it need to redefine the development objectives and the weighting of the three impact dimensions and their sub-criteria. The Impact Filter is derived from the poverty filter (Devaux & Thiele, 2004) and is still under development, as it needs further testing under different conditions to validate its adjustability and usefulness in different contexts.

Devaux A. and Thiele G. 2005. Filtros de pobreza para identificar oportunidades de mercado favorable para pequeños productores. In: Conceptos, Pautas y Herramientas. CIP, Papa Andina. p. 84-88.

A1. Initial application of the Impact Filter

In 2001, when the INCOPA project started, there was a need to prioritize lines of action that would benefit small potato growers. The objective was to improve the competitiveness of Peru's potato sector while empowering poor Andean potato farmers. There was also a need to identify and target existing or new market opportunities in order to improve potato farmers' incomes.

As a first step, three market opportunities were considered: potato chips, mini yellow potatoes and white chuño or tunta (naturally dehydrated potatoes). These were characterized using a simple table (see **Table 5**).

Table 5 Matrix for characterizing different market opportunities

Business opportunity	Production zone	Type of producer	Principal markets	Principal purchasers
Potato chips (industrial)	Coast and highlands	Large and medium	Urban (supermarkets and shops)	Housewives, youths and children
Mini yellow potatoes (export)	Highlands	Small	Urban and export	Adults abroad
Tunta (white chuño)	High altitude (Altiplano)	Small	Urban markets	Housewives descended from highland families

As all three of these market opportunities seemed attractive, the project team decided to screen them more systematically to determine their potential to benefit small-scale potato growers. Consequently, the initial table was transformed into a matrix to assess the potential of these market opportunities to produce the "right type of impact", as requested by the project. This matrix mutated into a detailed MS Excel spreadsheet, in which the main impact dimensions of the project (economic, social and environmental) were specified, along with relevant sub-criteria, and then weighted to reflect their overall and relative importance (see **Table 6**).

Then, a numerical ranking from 1 (a very negative impact) to 10 (a very positive impact) was used to rate the expected effect each market opportunity would have on the different impact dimensions. Finally, the weighted results from all impact sub-criteria were summed to allow comparison of the overall impact potential of the three market opportunities (see **Table 6**).

The yellow mini potatoes for export and tunta ("chuño blanco") received equally high ratings, as both are produced by small-scale farmers in the Andean highlands, implying a better impact potential to contribute to the project's objective (which is poverty alleviation and rural development). As a consequence of this exercise, and the fact that tunta can easily be stored and traded, compared to fresh potatoes for export, tunta was prioritized in the first stages of the INCOPA project.

Table 6 Example chart: evaluating different business opportunities in the INCOPA project

Overall objectives and sub-criteria		**Weighting**		**Potato chips** (industrial)		**Mini yellow potatoes** (export)		**Tunta** (white chuño)	
Economic Impact (poverty alleviation)		40%	100%	Evaluation (between 1 & 10*) / weighted results					
1.1	Potential to increase incomes in rural areas in the short term (direct or indirect)		30%	6	0.72	8	0.96	7	0.84
1.2	Potential to increase incomes in rural areas in the long term		40%	8	1.28	9	1.44	8	1.28
1.3	Potential to reduce the income risks faced by small-scale producers		30%	3	0.36	7	0.84	10	1.20
	Total of weighted coefficients				*2.36*		*3.24*		*3.32*
Social Impact (empowerment of the poor)		30%	100%	Evaluation (between 1 & 10*) / weighted results					
2.1	Potential to increase small-scale producers' self-esteem		20%	7	0.42	8	0.48	10	0.60
2.2	Potential to generate knowledge and contacts that foster long-term development		50%	6	0.90	8	1.20	8	1.20
2.3	Potential to empower persons who need special attention (e.g. youths, women, the elderly)		30%	7	0.63	7	0.63	10	0.90
	Total of weighted coefficients				*1.95*		*2.31*		*2.7*
Environmental Impact (sustainable use of natural resources)		30%	100%	Evaluation (between 1 & 10*) / weighted results					
3.1	Potential for the sustainable use of water and soil		50%	4	0.60	7	1.05	4	0.60
3.2	Potential to renew peoples' appreciation of the value and the need to conserve of traditional varieties (biodiversity)		50%	1	0.15	7	1.05	9	1.35
	Total of weighted coefficients				*0.75*		*2.10*		*1.95*

Result of the Evaluation	**Potato chips** (industrial)	**Mini yellow potatoes** (export)	**Tunta** (white chuño)
Economic Impact (poverty relief)	2.36	3.24	3.32
Social Impact (empowerment of the poor)	1.95	2.31	2.70
Environmental Impact (sustainable use of natural resources)	0.75	2.10	1.95
TOTAL	**5.06**	**7.65**	**7.97**

*** Evaluation Scale:** 1 = very negative effect, 5 = no effect, 10 = very positive effect

Tool 2

Market Chain Sketch

Cristina Fonseca, Kurt Manrique

Overview

When:	Final events of Phases 1 & 2
Who:	Facilitators
Preparation:	1 day
Duration:	10–15 minutes

Brief description

The Market Chain Sketch is performed by the facilitators of a participatory R&D process at a large event, in order to illustrate the need for better collaboration along a specific market chain.

Purpose

The Market Chain Sketch should be used during an event, when the goal is to develop a common vision among different actors involved in a market chain. In a very visual and innovative way, the tool:

- Illustrates a real problem affecting the chain, such as inefficiency, inequality and informality, all of which distort the relationships that exist among the links of the market chain.
- Introduces a potential solution by improving existing relationships and building new ones, allowing the actors to collaborate effectively when working together to achieve a common objective.
- Stimulates active involvement on the part of the observing stakeholders in a participatory process.
- Relieves the tension that can occur when antagonistic actors in the chain are first brought together.
- Promotes a closer relationship between the facilitators and fosters a sense of group identity among the participants.

Overall, this motivational sketch is used to make the audience more aware of the need to enhance collaboration along the whole chain by improved coordination of activities at different points in the chain.

Use in PMCA

The use of the Market Chain Sketch helps to clarify ideas, concepts and proposals that grow out of the PMCA process. In this sense, it is extremely useful for the final event of Phase 1, when a variety of actors involved in the chain meet for the first time and are confronted with the results of the market chain survey. The dramatization of the main problem and its potential solution should encourage stakeholders to begin sharing their ideas and working together (see **Application A2**).

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Step 1 Defining the theme and planning

The sketch must be planned by a group of R&D staff who have a good knowledge of the characteristics, limitations and opportunities of the market chain in question. When the sketch is used as a part of PMCA's Phase 1 event, this group may involve those persons who have conducted the market chain survey.

During the planning stage, the group should brainstorm the key message of the sketch and consider how it could be dramatized. This key message must be relevant to all the actors of the chain and reflect the need for collaboration along the chain. The use of symbolic elements, such as costumes and other props, should also be discussed, as these can be used to illustrate better certain situations and persons – however, care should be taken not to hurt anyone's feelings when doing so!

Step 2 Selecting the actors and preparing the script

The actors should all be R&D staff; none of the actors should be part of the chain, as a clear distinction must be drawn between the dramatization and reality!

In addition, a narrator might be needed to explain the context of the sketch, scene by scene. When the sketch is over, the narrator might want to reinforce the key message with some final thoughts.

The sketch should be structured in acts or scenes. Each act should have a script that is written down by one or two people drawing on the ideas of the group discussion. Such a script serves as a guide for the actors, allowing creative improvisation, as long as the main argument of the sketch and the script is followed!

The sketch should not be more than 10 minutes long, as this will (1) ensure that the audience does not become bored and (2) force the actors to communicate their key message in a very concise and clear way!

Step 3

Performing the sketch

The performance of such a sketch requires at least one rehearsal, so that the actors become familiar with their characters and the script. If the sketch will be performed in front of a large audience, microphones should be used during rehearsal. This helps actors get used to the microphone, and make sure that it is passed along to the next actor before he or she starts to talk.

The actors must use simple, local language and wear costumes that help the audience identify the characters they portray. To guarantee optimal understanding on the part of the audience, it might also be useful to use simple signs (e.g. "producer", "processor", "wholesaler") to identify each character and his or her specific location in the market chain.

In most cases, simple scenery will do, and it will not be worthwhile setting up a more sophisticated backdrop for the sketch.

PMCA facilitators dealing with a "Square Potato"

A2. "The Square Potato"

In 2002, when PMCA was first applied in Peru, a sketch was used to visualize Peru's potato market chain. The sketch was used initially to confront the different market chain actors with the key message of PMCA: all the actors involved in the chain must collaborate in order to take advantage of new market opportunities! The four-act dramatization clarified the fact that it is the consumer who decides what will sell and that the chain will only be successful if everyone collaborates with the spirit to respond to this demand.

Act 1

In a monologue, the potato producer laments about the technical difficulties of producing good-quality potatoes and always receiving low prices. The wholesaler-intermediary comes in and bargains with the farmer, making him accept a low price – again. Then he goes to the seller and offers him the sack of potatoes he just purchased. The seller, in a corner of the stage, also negotiating a low price, complains to the wholesaler about the poor quality of the product (lack of uniformity, dirt and inadequate packaging), warning him to do better next time. The seller then delivers the potatoes to a supermarket supervisor, who is not pleased either and offers to pay the seller in only 30 days, with a low price, too!

Act 2

A little later, a shopper arrives at the supermarket. The shopper goes to the supermarket supervisor, complains and demands a special type of potato, for which she is willing to pay a very good price: a square potato! The supervisor takes the request to the seller, who, disconcerted, passes it along to the wholesaler-intermediary, who asks the farmer for a sack of square potatoes.

Act 3

The farmer tries to respond to the request, but the product (a rectangular potato which is passed on to the wholesaler, and then to the seller and the supermarket) does not completely meet the requirements of a "square potato," and the shopper rejects it.

Act 4

Because of this unsatisfactory situation, one of the characters suggests that all the members of the chain get together to work jointly on the development of a "square potato". Consequently, all actors line up, giving the impression of a more organized, orderly chain. They discuss the problem and apparently find the solution: one by one, they pass the "square potato" along the chain, from the farmer to the shopper, who is very happy with the product.

Having seen that the market chain has responded well, the shopper makes a new request, offering an even higher price for a "blue square potato" – a real challenge…

Tool 3

Rapid Market Appraisal

Maria Elena Alva, Thomas Bernet and Gastón López

Overview

When:	Phase 2
Who:	R&D staff
Preparation:	2-3 hours
Duration:	2-3 days

Brief description

The Rapid Market Appraisal allows a rapid assessment of a specific market, in order to determine the commercial potential of new or existing products or services.

Purpose

In general, this tool helps to qualitatively assess market opportunities. The tool enables the user to:

- Gain an overview of supply and demand regarding a certain product.
- Analyze competing products and the way they are sold.
- Detect attributes that add value to the product.
- Determine uses, preferences and expectations for a specific product.
- Define possible research and marketing strategies (for product design, production planning, and positioning strategies, etc.).

Use in PMCA

When used as part of PMCA, the Rapid Market Appraisal is especially helpful during Phase 2, when different commercial innovations suggested by thematic groups need to be assessed, rapidly and at a low cost. The results of such rapid appraisal may not always be conclusive; sometimes new working hypothesis emerge, which can be targeted with other tools detailed later in this guide: the Quantitative Market Study (see **Tool 4**), Focus Groups (see **Tool 5**), Marketing Concept Development (see **Tool 6**), or the Business Plan (see **Tool 7**).

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Step 1

Defining expected research results

Although a Rapid Market Appraisal provides qualitative results, it is still important to specify what outcomes are expected from using this tool. This will allow efficient planning and guide the user through the mass of information available, some of which will be irrelevant!

Step 2

Defining information sources

If the Rapid Market Appraisal is conducted as part of a participatory process, an initial brainstorming session might help to define potential sources of information (e.g. market statistics, research documents, interviews with key actors, etc.).

Once all the different information sources have been listed, they should rapidly be prioritized within the group based on the following three questions:

- How relevant is this information source for the purpose of the study?
- How easily and quickly can the information be accessed and analyzed?
- With what sources of information should the study start?

Step 3

Analyzing the information

As a rule, the person in charge of the Rapid Market Appraisal should start to gather information which is (1) easy to access, (2) is up-to-date, (3) provides relevant insights and (4) requires little time for analysis. The aim is to obtain a fast overview and first key insights, in order to make optimum use of time. Sources of information that require more time to access and analyze should only be considered in a second round and only if there is a good reason to believe that they provide important additional insight. The following activities will help the user to become more familiar with the product that is assessed and its market:

- Visiting locations where the product is traded and sold – to determine what alternative products are available, studying uses, prices, forms of presentation and branding etc.
- Questioning family members and friends – to gather opinions about the product's potential uses and their perceptions of competing products.

- Searching the Internet – to gather both general and specific information about the product.
- Visiting research centers – to access expert knowledge (e.g. on production and processing).

To complement the information, follow-up activities might require a little bit more effort and creativity. For instance, individual in-depth interviews could be conducted, enquiring where and how consumers, processors or other key actors perceive the potential of new products. Such interviews could also include product sampling. Good ideas for structuring these interviews or group sessions are provided by the Focus Group tool (see **Tool 5**).

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Step 4

Presenting the study's results

It is a good idea to prepare a brief summary report (2-4 pages) containing the most relevant findings. Placing the main findings in a logical order on paper will guarantee that the results are well communicated, and that sound conclusions are drawn. Another interesting option to structure the main findings is to use SWOT-Analysis (see **Box C9**).

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The report should be complemented with an oral presentation, where findings can be discussed in a bigger group. When used in the PMCA process, findings should be presented and discussed in thematic groups. When used outside of the PMCA, other R&D specialists might be invited to the presentation of the results. Further R&D steps should then be defined during such a meeting if the findings outlined are positive.

Screening to determine the export potential of native potatoes at a trade fair

A3. Assessing consumers' perceptions of potato chips made from native yellow potatoes

During the first application of PMCA in Peru, a new product for children was developed: chips made from yellow-fleshed native potatoes. Since yellow-fleshed potatoes are sold in supermarkets at a higher price than conventional white potatoes, doubt arose whether these chips would also sell well to richer consumers in Peru, if a different marketing concept was used.

Because the International Potato Center (CIP) had been invited to participate in an export fair at which different new products were exhibited, it was decided to make use of this opportunity to assess the yellow potato chips being developed. As the product was being sampled, visitors to the fair were asked for their opinion on the chips' taste and their presentation; they were also asked how much market potential they felt the product had.

This rapid assessment confirmed that these chips are, in fact, very much appreciated by potential consumers (1) because they taste good and (2) because they are made from what is considered to be a gourmet Peruvian potato. These findings were used as the starting point to develop an additional marketing concept for "Orolitas", gourmet potato chips targeted at an adult market.

Packaging of yellow potato chips to target adults in supermarkets

Tool 4

Quantitative Market Study

Gastón López

Overview

When:	Phases 2 & 3
Who:	Consultant
Preparation:	1 week
Duration:	4-7 weeks

Brief description

The Quantitative Market Study is used to measure the potential and size of a market or product opportunity.

Purpose

The purpose of the Quantitative Market Study is to:

- Understand the characteristics, trends, and composition of the market associated with a specific product.
- Identify the consumer habits of a certain population group (i.e. target consumers) in relation to a product or set of competing products.
- Assess the size of the potential market for a product in order to estimate investment costs and expected profits.

Use in PMCA

The Quantitative Market Study might prove especially useful in Phase 2 of PMCA, when market opportunities are assessed (see **Table 1**). The Quantitative Market Study provides the "hard facts" of a market opportunity, including estimates of volumes and profitability, which can later be fed into a sound Business Plan (see **Tool 7**). Results of the quantitative study should be complemented with "soft facts" from prior qualitative research into product positioning, definition of product characteristics and target consumers, etc. (see **Tools 3, 5, 6**).

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Step 1

Defining the study objective

The first step is to determine the study objective:

- What market opportunity or product should be analyzed?
- What type of consumers are being targeted?
- What exactly needs to be measured?

Qualitative information from secondary sources (such as published statistics, reports, theses, etc.) or from qualitative work undertaken previously might be consulted to answer these initial questions (see **Tools 3 and 5**). Particular care should be taken to understand differences in socio-economic status, which imply varying consumption patterns and different perceptions, to determine consumer segments that value a specific product.

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Step 2

Determining the research variables

Once the objective of the study is clear, all the variables that have to be determined through the study are compiled into a list. This is fundamental, as it helps to ensure that no important data will be missing later on! In general, these variables clarify purchase and consumption behavior:

- Purchase – who, where, amount, frequency, brands, preferences.
- Use and consumption – for what, amount, frequency, who, where.

Since price and quality strongly influence people's purchase and consumption behavior, these two aspects must always be considered.

Step 3

Determining sample size and structure

The next step is to determine the sample size. In general, the more factors (consumer habits, education, sex, age, etc.) influencing the variables that need to be measured, the bigger the sample will need to be.

The size and structure of the sample also depends on how homogenous the population is and how accurate the results must be, especially when considering the interaction between variables (e.g. preference for brands x product use, etc.). If the research results must be statistically significant, the sample size should be calculated using the standard formulas that take

into account the margin of error. Marketing books state that as a general rule a minimum of around 250 interviews are required for a Quantitative Market Study to give statistically significant results.

The process of selecting interviewees may vary, depending to a great extent on what product is being studied. One way is to randomly select interviewees that have the characteristics of the target consumer (see **Application A4**). Another way forward is to find a database containing the details of potential consumers. People can then be selected from this and asked if they would be willing to participate in an interview. It is important to remember that the selection process should not distort the representativeness of the sample!

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Step 4

Designing the questionnaire

The questionnaire must cover all the variables that need to be considered (see Step 2). Questions must be asked in a logical sequence using straightforward (everyday) language, as this will help the person being interviewed to easily understand the questions.

The questionnaire can include different types of questions: closed (those requiring only "yes" or "no" answers), open (those requiring the interviewee to explain their answer more fully, for example, "why do you consume this product?") and those that require the interviewee to respond according to attitude measurement scales ("a little," "a lot", etc.). The questions must be clear and direct, avoiding any ambiguity that could bias the information gathered, a problem which can easily occur when asking leading questions.

Unless the participants are being paid, interviews should take less than 30 minutes, to avoid the quality of the answers being affected by the interviewees becoming bored.

Care must be taken to formulate questions which capture the relationship between price and quality, making it possible to make realistic sales projections for different price scenarios.

Step 5

Pilot testing of the questionnaire

The questionnaire should be tested before it is used "in the field". A few persons already known to interviewers can be used for this purpose, as they may have more patience if the interview takes too long or if questions are a little confusing (and so need to be revised)! At the same time, these persons might be more open and willing to share other interesting and relevant information related to the product, which might not be explicitly considered in the questionnaire – the questionnaire can then be revised to ensure that such issues are addressed with later respondents.

Based on the comments and insights gained from this initial experience, the questionnaire should be improved and then photocopied, so that the interviewers recruited for the study can use it.

Step 6

Recruiting interviewers

The profile of the interviewer (age, social class, sex) should be appropriate for the product being studied. For instance, men should not conduct interviews concerning lipstick!

Interviewers should be carefully trained. The training should include a presentation of the objectives of the study and how the interviews should be conducted. Emphasis must be given to the following aspects of the study:

- Good interviewer–interviewee interaction.
- The best way to ask the questions.
- The correct way of recording the information.

If the interviewers are inexperienced, it might be useful for them to assist in an interview conducted by an experienced interviewer.

Step 7

Carrying out the interviews

The interviews should be held at times and in places that are convenient for the interviewees.

Because such a market study will involve various interviewers, the process needs to be supervised to ensure the consistency of responses. To ensure that interviewees were actually interviewed and that the correct protocol was followed a random follow-up of those interviewed could be carried out by the supervisor.

Step 8

Reviewing data entry

Once the interviews have been conducted, the data from each questionnaire should be reviewed, to verify the quality and consistency of the information provided by the interviewees. Each questionnaire must also be coded to indicate who did the interview.

To facilitate data entry, each question and its possible responses must be assigned numbers. A codebook must be prepared, containing the different numbers assigned to the responses to each question. Using these codes, the responses are then entered into a database, question by question. Microsoft Excel is an ideal program for this, as it is very user-friendly with regard to data processing and makes the subsequent visualization of key data very easy.

Step 9

Analyzing the information

During an initial review of the results, it is useful to analyze the differences in responses, question by question, across the whole sample. To get a fast visual impression, the preparation of tables or graphs can be helpful at this point.

Based on the general tendencies and conclusions, the questions are analyzed in greater detail, comparing key information across different subgroups of the sample. For instance, there may be significant "gender differences", in terms of age and sex, or with regard to certain product aspects. It may be appropriate to verify these differences later on statistically.

Step 10

Market size projections

To calculate the potential market size for the product being investigated, the results from the study sample must be extrapolated to the total number of potential consumers. The accuracy of this approximation may vary, depending on the data available. Overall, the following calculations need to be done to assess the potential market size in terms of the numbers of consumers and expected total consumption:

- **Potential consumers** = % of potential consumers of sample x total consumers with characteristics of the sample.

- **Potential consumption** = potential consumers x average consumption found in the sample.

In many cases, these consumer and consumption estimates will be far too high, as it will be unlikely that all these consumers will be able to access the product being studied. Thus, this number might need to be adjusted, using information about product distribution to make a more realistic estimate of the real market potential.

Step 11

Presenting the results

To document and illustrate the results of the study, charts should be prepared showing the responses to each question. Whenever possible, statistical evidence should be used to back up the differences in perceptions among sample sub-groups (for instance, differences of consumption behavior between men, and women or older and younger consumers). Clear thinking will be needed to explain and derive the potential market size of the product (see **Step 10**), taking into account different price scenarios.

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The final report must make clear the objectives of the study, the way the sample was selected, the process used to analyze the results of the study and the conclusions drawn. The study will be more credible if the conclusions can be backed up statistically and significance levels included. Since the report might be rather extensive, a one- or two-page executive summary is helpful to allow the reader to quickly grasp key results.

A4. Assessing the potential market size for potato chips made from native potatoes

Once the qualitative study showed that consumers had a positive attitude toward native potato chips, a quantitative market study was conducted as part of Peru's first application of PMCA. The objective was to examine the structure of the potato chip market in the city of Lima and estimate the market potential for potato chips made from native yellow potatoes.

Based on the standard recommendations for marketing studies such as this, 250 personal interviews were conducted. A structured, standardized questionnaire was designed which contained open and closed questions and attitude measurement scales. Interviews were conducted over a two-week period by six interviewers, who were specifically trained for this task. The sample was made up of people of both sexes, aged between 8 and 25 and living in the city of Lima; by selecting the interviewed persons randomly from different parts of the city.

The study found that 96 percent of the interviewees customarily buy potato chips. Projecting that figure to the total number of possible consumers, it was estimated that the potato chip market in Lima consists of approximately 2,650,000 people. The analysis of the results showed that consumption patterns were similar in all social classes. In all social groups, most chips are purchased from small shops and street kiosks, and not in supermarkets.

Information was also obtained concerning the preferred package size, the quantity of chips purchased on each occasion, the frequency of purchase, brand influence, and the image and positioning of the main brands.

As a result, it was found that 78 percent of consumers would be open to the idea of purchasing potato chips made from native yellow potatoes, given the positive image of the yellow potatoes, the novelty of the project and the particular taste of this potato chip. In addition, 16 percent of consumers said they would not purchase such chips under any circumstances, while 6 percent said they would need to sample the product first.

Tool 5

Focus Groups

Maria Elena Alva, Thomas Bernet

Overview

When:	Phases 2 & 3
Who:	R&D staff or consultant
Preparation:	1-2 days
Duration:	45-90 minutes

Brief description

Focus Groups help to evaluate the different marketing aspects associated with products and services, through structured group discussions involving six to eight people who represent the target consumer market.

Purpose

Focus Groups are used to evaluate new or existing products based on the perceptions and ideas of actual, or potential, consumers. Working with small groups makes it possible to validate individual and group perceptions, and:

- Understand consumer habits with regard to certain products.
- Identify and evaluate consumers' reasons for purchase and consumption, or factors that add value to the product being analyzed (i.e. purchase factors).
- Evaluate marketing concepts (i.e. the combination and priorization or weighting of purchase factors) and promotional strategies.
- Assess label designs, product packaging, publicity material, etc.

Use in PMCA

In the case of PMCA, Focus Groups are especially useful in Phase 2, to rapidly assess the commercial potential of certain market opportunities; in Phase 3, the tool can help generate key information concerning the development of marketing concepts and validate draft versions of labels, product packages and promotional materials (see **Tool 6**).

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Step 1

General planning

In order to obtain good results, a Focus Group must be well planned. First, it must be clear what type of information is needed and who should be invited to attend the interview sessions. This might require qualitative research before proceeding with the Focus Groups, to specify the market segment and potential consumers (see **Tool 3**).

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Often, focus groups are conducted in special rooms that contain two-way mirrors, which allows marketing specialists to observe group interactions. However, a "normal" environment should function just as well, as long as the room is welcoming and the participants are able to sit down in a way that allows all of them to see and hear each other clearly. To make participants feel comfortable and so participate well, it may be useful to provide refreshments or snacks – making sure that they don't interfere with the interaction of the group and distort the research results (a point which it is especially important when products are being sampled).

Videotaping may help to evaluate the responses of the group, but it should only done if active participation is not hampered. Having observers sitting in the back part of the room should not cause any problems, as long as they don't intervene and participants know why they are there!

Step 2

Planning a session

In order to obtain all the information needed, each Focus Group session must be well structured and consider the key issues to be discussed in a logical sequence. The art of facilitation is to ensure that this pre-defined structure is followed during the session without the participants realizing it!

A homogeneous group of 6 to 8 potential consumers will be invited to each session. Ideally, they should be of the same sex and have the same socio-economic status, and similar consumer preferences. Hence, the type of persons to be invited will vary depending upon the product being discussed.

A facilitator with the capacity to guide such discussions should be chosen for the meeting. The facilitator must have an affinity with the type of people attend-

ing the meeting. If different Focus Group sessions are conducted on the same topic, the same facilitator should be used, so that the results are not biased because of differences in facilitation style or the sequence in which issues are raised.

The facilitator should have an assistant, who will help to organize and distribute materials. This person should also take notes on a flipchart during the session, in legible writing, and remind the facilitator if key issues are omitted by mistake.

A Focus Group session should not last longer than an hour and a half. The meetings should be planned at a convenient time for those invited, to avoid the risk of the participants feeling rushed or leaving early!

Step 3

Conducting the session

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The general sequence for group work given below (1 to 6) is helpful if a new product or marketing concept (see **Tool 6**) is being evaluated. If the Focus Group is being used to obtain initial insights (for instance, to define a new working hypothesis) the structure of the meeting may be less rigid, giving more room for the discussion of the topics raised by the participants themselves.

Facilitators must carefully plan the session, to ensure that they do not influence participants' perceptions. For instance, confronting participants with the product too early in the session might cause them to make premature statements before they have sufficient information to voice a sound opinion (see **Box T21**).

T21. Be careful not to influence perceptions

> It is very important to undertake product sampling after the marketing concept for a product is presented. If the product is sampled first, consumers could draw misleading conclusions because they lack information, and might misinterpret certain product aspects. As a result, a positive factor might actually be perceived as a negative one, simply because the consumer did not have enough information about the product. For example, people might think a purple potato is spoiled if they don't know that its colour comes from a natural pigment that helps to prevent cancer!

1 Introduction

A good introduction to the meeting is important as it creates a friendly environment from the beginning. This makes participants feel comfortable and encourages them to share their ideas. Every person should introduce her or himself simply by saying their name, and nothing more – to prevent preconceived perceptions or hierarchy within the group that might hinder free participation.

During the introduction, the goal of the meeting and the "rules of the game" must be explained: every comment is welcome, because it is important to gather different viewpoints. People's opinions will not be judged!

2 Understanding general perceptions

Without showing the product being analyzed, the facilitator should begin asking general and open questions about the product, with the aim of understanding the general perceptions and habits of the consumers participating.

All individual answers and comments should be summarized on the flipchart. This will stimulate new ideas and will prove helpful when the facilitator or the group wants to return to certain comments. Also, after the meeting, the flipchart sheets make evaluation easier, since all the relevant information is already recorded.

Based on the comments made, the facilitator's aim is to identify the most relevant elements from the participants' standpoint. The facilitator seeks to understand the group's shared view on the reasons why the product or service might be purchased (i.e. identification of "purchase factors").

Possible questions during this part of the session:

- Do you purchase and/or consume a product of this type?
- Why do you buy it?
- What are its benefits in relation to alternative products?
- When do you buy it?
- How often do you buy it?
- Who mainly consumes it and why?

3 Understanding the visual logic

At this stage, the facilitator should present a product label or package. Now, the facilitator wants to know how participants perceive the visual marketing concept and if it is congruent with the ideas and important "purchase factors" mentioned before the participants saw the product (**see 2**).

The facilitator might want to focus the group's attention on both the physical characteristics of the product's packaging (size, shape, material, etc.) and the graphic elements (logo, colours, design, etc.) that communicate the product's value. The key issue is to determine whether the packaging helps the participants to perceive the product's real value and its comparative advantages.

In order to generate the necessary feedback, the facilitator must use precise questions and stimulate conclusive answers. For instance, it is not enough for the participants to simply say that the packaging "is pretty" or to state "I like it"; the facilitator needs to know exactly how each element is perceived and if it enhances the "purchase factors" that should be communicated to consumers. For instance the facilitator might ask questions such as: "What is the most relevant information on the package – and why?"

Also, with the product in front of them, it is important to determine how much the participants would be willing to pay. To make sure that each person expresses his or her opinion, everyone is asked to write the price they would pay on a piece of paper without letting others see it.

Possible questions during this part of the session:

- What do you think of this product?
- Do the size and shape of the package seem appropriate?
- Does the packaging reflect the product's advantages?
- Is it clearly distinguishable from other products?
- Is there anything you don't like about the packaging and that you feel should be improved?
- Where should this product be sold?
- How much would you pay for it?

4 Evaluating the "perception gap"

When analyzing a product that will be consumed, particularly a food, sampling is a very helpful way of assessing if the product is what it promises to be. In other words, the facilitator needs to find out if the consumer's perception at the moment of consumption matches his or her expectations at the moment of purchase. If there are differences, the marketing concept needs to be changed, or the product improved:

- If the product is better than the packaging promises, many potential consumers will never know the real value of the product, as they won't buy it...
- If the package oversells the content, the result is guaranteed: a frustrated consumer who will not purchase the product again and will provide bad publicity for it.

An important index of satisfaction is the price that each participant would be willing to pay at this point (i.e. after having tasted the product). So, the facilitator should again ask the participants to write down the price they would now be willing to pay, below the price they have written down before.

Possible questions during this part of the session:

- What do you think of the taste, consistency, colour, and size of the product?
- Do these elements correspond to what the packaging promises?
- Is there a conflict between what the packaging promises and what the product really offers?
- Should other elements be mentioned on the package?
- Does the price mentioned earlier seem appropriate, or should it be higher or lower?

5 Evaluating merchandising options

Since by this point the participants know the product fairly well, they can now be asked to share their opinions regarding how the packaging could be improved and where and when the product should be sold. Also, they might give interesting advice on promotion, or how to best orient the product so that it appeals to the target consumers.

Very practical aspects should also be discussed at this point. Examples include: what type of packaging would be most practical to use, where the product should be located in the store or market, and what measures might be taken to ensure it attracts attention. So, for instance, participants might consider its location on the shelf (e.g. category and height on the display rack) and its graphic elements (e.g. letters, colours, drawings, photos), both of which are of critical importance in allowing the product to effectively communicate its value to potential consumers in a few seconds.

Effective strategies for publicity might also be discussed at this stage. Are special sales people and stands, posters or pamphlets feasible and cost effective options to stimulate sales? It may also be possible to promote the product by linking it with other products. So, for example, new sauces could be sold and promoted alongside known brands of potato chips. But participants may come up with other creative ways of promoting a product.

Possible questions during this part of the session:

- At what sales points should the product be sold, and where should it be placed?
- What is the most practical packaging when purchasing and using the product?
- Should different types of packages be offered, and why?
- What means of promotion could be most effective to attract consumers' attention and stimulate sales?

6 Closing the session

At the end of the meeting, it is important to thank the Focus Group participants, not just with words, but also with a little gift. The ideal gift is the product that they have been evaluating – but only if they like it!

In addition, giving the product to the participants as a gift also allows you to conduct a follow-up survey, in which you can ask more detailed questions about the practical use of the product at home, for example.

Step 4

Evaluating the meeting

The Focus Group session should be evaluated as soon as it ends. The facilitator, together with the assistant, should rapidly evaluate the information obtained from the flip-chart sheets and any notes that were taken. The main conclusions should be written down. The prices that participants were prepared to pay at different times should be analyzed to determine their willingness to pay for the product:

- If the second price (noted at the moment of consumption) is higher than the first (noted at the moment of seeing/purchasing the product), the conclusion is that the product actually delivers more than the marketing concept and packaging promise it would.
- If the second price is lower than the first, the expectations raised by the marketing concept and packaging are too high compared to the perceived quality of the product when consumed.

In either case, it is important to analyze what would be the best way to readjust the marketing concept for the product, in order to ensure that the consumer's perception of the product at the time of purchase matches their perception at the time of consumption.

Finally, it is important to write a good concise report that documents the structure of the Focus Group, its results and conclusions. This report will help keep in mind the main results and conclusions when follow-up activities are defined or the product is assessed again later on.

A5. Evaluating the marketing concept for yellow potato chips

To evaluate two marketing concepts for yellow potato chips, a Focus Group session was organized with six women who have children between the ages of 3 and 8.

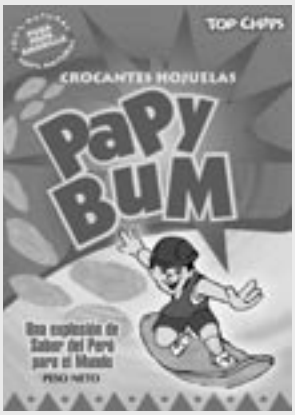
After asking their general opinions about this type of product, a marketing concept aimed at children – "Papy Boom" – was presented. The participants were asked to comment upon how they perceived the packaging. This provided a variety of useful information. For instance, they mentioned that the generic brand used on the package "Top Chips" did not make sense to them, and that the design did not inspire confidence. They also noted that it is extremely important for them to know that a product is natural and nutritious while containing as little fat as possible. For them, these were the "purchase factors" that mattered when they considered buying a product for their children.

Then, they were presented with an improved concept for "Papy Boom". All liked this packaging better, although they still insisted that nutritional information was lacking. They also commented that, because they were not familiar with the company mentioned on the package (A&L), it would be good to place the International Potato Center's logo on the package, as it would inspire greater confidence.

In general, the opinions given after sampling the product reflected the value perceived when viewing the packaging. This was confirmed by the fact that the prices noted before and after sampling were consistent. The participants mentioned that they would like to purchase the product in supermarkets, gas stations and kiosks. Ideally, there should be different sized packages: small, for lunchboxes; medium-sized, for family gatherings; and large, for birthday parties.

In the end, the participants were thanked and given several bags of the products as a gift. All agreed to take home a questionnaire to gather their children's opinions – these would be filled out at home and the sheet would then be returned to the facilitator. One striking result of this additional research was the fact that children over the age of 6 did not like the picture of the boy on the first package, stating "he looks like a little kid!"

All of this information led to a refined concept that was well received by those that had participated in this Focus Group.



Initial and improved versions of "Papy Boom" packaging

Tool 6

Marketing Concept Development

Alain Barrero, Thomas Bernet

Overview

When:	Phase 3
Who:	Consultant
Preparation:	2-3 days
Duration:	2-3 weeks

Brief description

Marketing Concept Development is the process of identifying, weighting and visualizing those elements that cause target consumers to perceive the real value of a specific product or service. In this sense, a marketing concept is a construct made up of different aspects of a product (such as package size and form, label information, price, etc.) all of which communicate in the best possible way its value for the consumer.

Purpose

Marketing Concept Development seeks to differentiate a product from its competitors through a sound commercial strategy, clarifying:

1. The target consumer population.
2. The points of sale for the product.
3. The elements that add value to the product in the eyes of consumers (i.e. purchase factors).
4. The ways in which the different valuable attributes of the product can be communicated.

Use in PMCA

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When used with PMCA, this tool can be of great help in Phases 2 and 3 to shape "market" opportunities for both the private and the public sector (see **Table 1**). In either case, a well-constructed marketing concept will play a key role in increasing the chances of "market success" of a new product:

- For the **private sector**, marketing concepts are powerful tools for focusing product sales towards particular market segments or target consumers, while differentiating the products from others by emphasizing its distinctive qualities.
- For the **public sector**, marketing concepts can be an interesting way of fostering rural development by promoting products and services that enhance collaboration and incomes in disadvantaged areas (e.g. food products with local brand names).

Step 1

Identifying interesting product attributes

The starting point for any marketing concept is the identification of product attributes that add value to a product, on the one hand, and differentiate the product from competing products, on the other hand.

To ensure that a product is really pleasing to consumers, Rapid Market Appraisal (see **Tool 3**) or Focus Group research (see **Tool 5**) may be conducted before the market concept is developed. Whatever method used, those asked for their opinion must feel that they are being looked on as "experts", and should feel that their perceptions are valuable, even if they are negative!

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Step 2

Achieving greater value at a lower cost

If Step 1 confirms that a product has interesting product attributes (i.e. purchase factors, which add value to the product in the eyes of consumers), production options need to be identified that can deliver these unique product attributes at the lowest possible cost. This will enhance the product's competitiveness in the market when launched.

To draw on the valuable information that can be provided by consumers, Focus Group research (see **Tool 5**) might be very helpful at this stage, involving consumers who represent the market segments that best appreciate the initially identified purchase factors.

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The Focus Group should be conducted so that participants can appreciate a clear hierarchical relationship among the different purchase factors. In other words, the researcher must understand consumers' perception, how they prioritize the different purchase

factors, and how they are related. The fact that a product's principal advantage must be emphasized to bring across the main reason why it should be purchased; other advantages might help to add value to the product, but they should be communicated less forcefully.

Applying such a clear ranking of product values will inspire confidence when the product is being purchased: by briefly looking at the product package, the consumer should know what it is good for! For instance, a consumer will be confused if a product is sold as being nutritious, easy to use and cheap, all at the same time; however, they will feel comfortable if a package "tells" them that the product is, first of all, nutritious, and, additionally, it is also easy to use and not too expensive!

Step **3**

Designing the marketing concept

Once the hierarchy of different product attributes has been defined, the task is to convert this information into a viable design that reflects these values and communicates them effectively to the target consumers. In other words, the hierarchy of "purchase factors" needs to be transformed into package design. A key element in this work is the use of trademarks or brand names, which help to differentiate the product by giving it its own identity, with a name and "face" (see **Box T22**).

T22. Using brand names for differentiation

When creating new brands, it is essential that they respect and reinforce the hierarchy of product values. Moreover, the brand name chosen must be easy to read, pronounce and memorize – so that the consumer becomes familiar with it and is able to relate it to the set of values that stand behind the product. In general, brand names should be registered to prevent others from simply copying the product and its marketing concept, where the brand is key. This is especially true when the brand is well-known to consumers.

The graphic designer's task will be to bring all important product elements into visual harmony. The packaging alone should attract consumers' attention,

through its use of shape, colour and design. The fact is that a supermarket shopper, for instance, looks at dozens of products in a few seconds! Therefore, the product only has a very short amount of time in which to be seen and attract attention!

Overall, a valid package design must respond to three key moments when "interacting" with potential consumers:

- Attracting attention with its appearance.
- Forcing the consumer to study the package more closely.
- Convincing the consumer to buy it because he or she detects additional information that makes the product even more valuable.

When designing the packaging for the product, it is also important to take into account the efficient distribution and display of the product. For example, a product for children should not have a design which forces the retailer to place it at the top of the display rack, where it cannot be seen, or away from similar products elsewhere in the store, just because its packaging won't fit on the right rack!

Because the success of a product sold in a supermarket depends greatly on the quality of the design (i.e. the visual implementation of a sound marketing concept), it is advisable to work with a good designer who has a good knowledge of marketing. The fact is that not every graphic designer is capable of converting a marketing concept into an attractive commercial package!

Step

Evaluating the visual marketing concept

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The "moment of truth" comes once the marketing concept has been transformed into the first prototype packaging. The ideal tool for evaluating the quality of this work is the Focus Group (see **Tool 5**).

Based on the conclusions of Focus Group sessions, the designer will correct and improve the marketing concept. The goal is to obtain an attractive but honest product package. Once the final design of the product has been completed, it might be worth asking those

people who participated in the Focus Group to revaluate it.

Later on, once the product is on the market, it would be ideal to conduct a survey of those buying the product, to ask them if the product's packaging reflects the "real" value of the product and if they perceived the product differently at the moment of purchase and at the moment of consumption.

A6. Creating "Puré Andino"

When PMCA was applied for the second time in Peru, a new potato product was developed. Spurred by a company's interest in developing an instant soup made from native potatoes, those involved in PMCA discussed how to process these potatoes, taking into consideration the fact that many native potatoes have very deep eyes. In order to reduce processing losses, it was suggested that the potatoes should be processed into flakes without being peeled, thus retaining more fibre and more nutrients. This suggestion was interesting from an economic standpoint as it both increases the amount of raw material that can be utilized and keeps costs low. It was suggested that these flakes could also be used to produce mashed potatoes; however, it was necessary to find out how such a product might be received by consumers.

A rapid search of the Internet, as part of a Rapid Market Appraisal (see Tool 3), revealed that similar types of instant mashed potatoes already existed in the United States. Retaining the skin could provide an interesting factor that would differentiate the product and motivate people to buy it, if they were aware that it added nutritional value in a natural way. Preliminary tasting tests indicated that the product might be well received if the consumers were not put off by the fact that it looked different from other types of mashed potatoes because the skin had been retained.

With this information and the help of a graphic designer, a prototype package was prepared. This was then evaluated by two Focus Groups (see Tool 5). It was concluded that the marketing concept used to sell the new "Puré Andino" instant mashed potato should focus more strongly on shoppers who prefer natural products, as it contains neither preservatives nor artificial colouring. The package should also make clear that the product is ideal for housewives, who appreciate that the product is quick and easy to prepare, but still has a great taste!

Final packaging for "Pure Andino", an instant mashed potato product made from native potatoes

Tool 7

Business Plan

Miguel Ordinola, Thomas Bernet

Overview

When:	Phase 3
Who:	Facilitator or hired consultant
Preparation:	1-2 days
Duration:	2-3 weeks

Brief description

The Business Plan is a strategic document that describes all aspects of the development of a market opportunity, and which includes a projection of the expected profitability of a venture once implemented.

Purpose

A Business Plan presents all aspects of a new business in a simple, comprehensive way. In this sense, it serves as the basis for decision-making among promoters and can be used to persuade new actors to get involved, particularly new financial partners.

Operationally, the Business Plan helps to plan, take the steps necessary to implement operations and define the roles partners should play.

Use in PMCA

When used with PMCA, the Business Plan enriches the participatory process and forces stakeholders to analyze and describe in detail, on the basis of consensus and specific commitments, all the components needed to take advantage of a market opportunity. In this sense, the Business Plan can serve as a guide when participants are working to address all the relevant aspects of a proposed business venture during Phases 2 and 3 of PMCA (see **Table 1**).

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Step 1

Summarizing the main idea

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As a first step, it is advisable to think through a business idea "in theory", and then summarize the key points in a short document. The Business Plan structure (see **Application A7**) can be used as a guide for briefly covering the different aspects.

If the market opportunity is shared among several actors, an in-depth discussion among all of them is necessary to clarify all the details related to this business idea. Finally, this summary will serve as a "baseline agreement" for the business idea.

Step 2

Agreeing on how to prepare the document

Once the summary has been agreed upon, those involved must decide who will take the lead in developing the whole Business Plan. This person should have experience with this tool. In addition, he or she should be able to analyze complex information and translate it into a concise and logical document.

Ideally, one of those involved in the business venture should take on this task because they have a clear understanding of the business idea and are aware of previous research findings. However, if the necessary time or skills are lacking, a consultant could be hired to undertake this task. One considerable advantage if working with consultants is that it is easier to ensure that deadlines are met – this is more difficult when the person doing the work is not being paid! In a consultancy contract, responsibilities for both the consultant and the promoters must be defined, in terms of providing the information required and work supervision. But when hiring a consultant, be sure he or she is really capable of doing the work required (see **Box T23**).

T23. Checking first the quality of work

> Before hiring a consultant, it is advisable to screen different candidates to determine their experience and their ability to develop a business plan. To do this, it is best to ask candidates to provide one or two examples of business plans that they have prepared previously. These examples will show if the person in question is capable of taking on this important task. Let's be clear: a bad business plan is the first important step on the road to losing a lot of money!

Step 3

Analyzing all relevant data

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The person in charge of developing the Business Plan must ensure that all relevant information is on hand. For that, the Business Plan structure (see **Application A7**) can be used as a checklist. Additional information might need to be obtained through further research, including individual and group interviews (see **Tools 3** and **5**).

After the data has been thoroughly analyzed, the different sections of the Business Plan are prepared, taking care that the different parts of the document are consistent. The initial summary of the business idea (see **Step 1**) can be used as a starting point when developing the entire Business Plan, as it provides all the key information needed for each section of the full Business Plan.

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The initial summary can also serve as the basis for the executive summary, which is written last and then placed at the beginning of the document. The entire document, including appendices with cash flows and profitability calculations, should not exceed 25 pages.

Step 4

Presenting the document

The draft of the document should only be shared with those actually involved in the business proposal; their comments will reveal if the document is good enough, or if adjustments are needed. Also, this first round of revision will help those involved in the venture consolidate their main business idea, enhancing consensus and commitment.

If the key actors of the business venture do not consider the Business Plan to be confidential, it can also be presented to a larger group for discussion, in the hope that new actors get involved and help to "catalyze" the implementation of the business proposal. When used as part of PMCA, such a Business Plan could be presented at the final large event of PMCA, with the aim of attracting additional partners or potential investors.

A7. Structure of a Business Plan

1. **Executive summary** [1 page]
   This section summarizes concisely the different aspects of a Business Plan.
   - **Sources of information:** The different sections of the Business Plan.

2. **Name and brief description of the product** [1-2 paragraphs]
   This section gives the name of the product and a brief description of it. It also explains which consumers will be targeted and why the product is valuable for them.
   - **Sources of information:** Discussions and agreements among those involved in the business, and use of the Rapid Market Appraisal (see Tool 3) and Focus Groups (see Tool 5).

3. **Description of the commercial potential of the product** [1-2 pages]
   This section provides a detailed description of the market in which the product will be positioned and how it will compete against its competitors. Prior qualitative or quantitative research must be used (1) to indicate why the product provides value for its target consumers (i.e. discussion of purchase factors) and (2) to estimate the size of the potential market.
   - **Sources of information:** Qualitative and quantitative market studies (see Tools 3, 4, and 5).

4. **Description of the production process and its advantages** [1-2 pages]
   This section describes all the stages of the production process up to consumption, as well as all the actors who will participate in the business along the market chain. The information reveals how the process takes advantage of synergies along the market chain and how the process is complemented by other activities that keep costs down. At all points in this review the product must be compared with its competitors.
   - **Sources of information:** In-depth interviews, Focus Groups (see Tool 5) and SWOT-Analysis (see Box C9).

5. **Description of the advantages created for society** [1-2 pages]
   This section is not part of an ordinary Business Plan. However, it is included here to make explicit the justification for public sector support. The section should include a qualitative description and explanation of how the business will benefit society (for example, by alleviating poverty, fostering rural development, conserving biodiversity, etc.).
   - **Sources of information:** Impact Filter (see Tool 1), in-depth interviews with key stakeholders.

6. Description of actors involved and of their roles [1-2 pages]

This section presents the actors who will participate in the business (i.e. business partners), emphasizing the specific role of each one and the skills they have. It must also indicate how the actors will work as a team, keeping interaction costs as low as possible.

- **Sources of information:** Discussions among promoters.

7. Evaluation of critical factors [1-2 pages]

This section reflects on critical factors that may stimulate or jeopardize business success. These factors may be internal (under the control of those involved in the business) or external (outside their control). The reader must understand the degree of uncertainty associated with these factors, how they interrelate and how the business partners might influence each one.

- **Sources of information:** SWOT-analysis (see Box C9), in-depth interviews.

8. Profitability estimates based on different scenarios [2-3 pages]

This section considers the economic side of the business. When the exact size of the market is uncertain, three reasonable scenarios might be considered. If the Business Plan is simple, expected profitability levels can be derived from income and cost estimates; if it is well prepared – and especially if considerable initial investments are needed to start up the business – an expected cash flow stream must be derived from estimated annual income and expenditures, making visible the capital needs at the different stages of the business. In this latter case, profitability is calculated based on the Internal Rate of Return (IRR), which can easily be calculated if Microsoft Excel is used for data analysis. Also the Net Present Value (NPV) can be calculated with Microsoft Excel indicating how much monetary value the business is likely to create in the future.

- **Sources of information:** Quantitative Market Study (see Tool 4), in-depth interviews, cost calculations.

9. Investment plan and promotion strategy [1-2 pages]

This section tells the reader how much financial capital the business requires and specifies investment needs, including those for product promotion. If strategic partnerships are established as part of the marketing strategy, these will be described in detail here. If the product creates benefits for the public (see Section 5), this section must also explain how R&D organizations or the government will support the business and its promotion activities.

- **Sources of information:** Previous sections of the business plan (see Sections 7 and 8), discussions among promoters.

First applications of PMCA

"Learn from others what you need to learn."

Content of this chapter This chapter describes the first applications of PMCA, illustrating how the basic theoretical concepts of PMCA were transformed into practice in each situation.

Introduction

A learning experience PMCA was developed only recently, within the context of national potato projects in Peru and Bolivia. These projects have helped to shape and validate PMCA, while PMCA has provided them with important methodological guidance that has allowed them to strategically involve market chain actors in a demand-oriented R&D process.

From the Andes to Africa The use of PMCA in Peru and Bolivia has already generated considerable interest within the R&D community. And, because PMCA is flexible and adaptable, it is now also being applied in Uganda where different R&D organizations have expressed an interest in applying this method to the potato, sweetpotato and vegetable sectors.

Need for new applications We hope that the lessons learnt from the first applications of PMCA will inspire others to apply this method in new contexts, so allowing it to be further fine-tuned! Thus, we hope to soon expand this section of the manual by adding examples of PMCA from different parts of the world.

Summary of described PMCA applications

- **Promoting innovation in Peru's potato sector** recounts the first time PMCA was applied to improve market linkages and the competitiveness of Peru's potato producers.

- **Promoting the use of native potatoes in Peru** describes the second application of PMCA in Peru, when the PMCA process focused on native potatoes in order to more directly benefit small-scale farmers in the Andes.
- **Generating new products in the Bolivian potato sector** describes the first application of PMCA in Bolivia, when it was used to create new market opportunities for native potato producers.
- **Creating collaboration and trust along market chains in Uganda** outlines how PMCA has been taken up by R&D organizations in Uganda, where it has been used to foster market chain collaboration in the potato, sweetpotato and vegetable sectors.

R&D staff from Uganda assessing PMCA

PMCA Application 1

Promoting innovation in Peru's potato sector

Thomas Bernet, Gastón López, Kurt Manrique

Overview

Purpose:	To improve the competitiveness of the Peruvian potato sector
Who:	INCOPA Project, CIP
Duration:	March 2002 to June 2003

Context

Since 2002, the International Potato Center (CIP) has been developing and applying PMCA as part of its INCOPA Project, in order to create new market opportunities that would be of particular benefit to small-scale potato producers in Peru.

It was clear to the project managers that small-scale potato producers would only be able to take advantage of new market opportunities if they were able to collaborate successfully with other actors in the market chain. The question was: how could such collaboration be stimulated?

In order to build collaboration, the RAAKS methodology (Rapid Appraisal of Agricultural Knowledge Systems) was applied to the market chain, emphasizing the joint development of new business opportunities. This particular application of RAAKS gave birth to PMCA, a market chain method specifically designed to stimulate joint innovations.

Engel P. and Salomon M., 1995. Facilitating innovation for development: a RAAKS resource box. Kit Publications, Amsterdam, the Netherlands (available at www.kit.nl).

PMCA Phase 1

As a first step, a market chain survey was conducted. This involved 24 qualitative interviews with different actors in the market chain. For three weeks, the interviewers spoke with farmers, NGOs, merchants, processors and distributors.

The assessment revealed that the potato market chain in Peru is highly informal, and that trust is lacking along the whole chain: it is common for both providers

and clients to be deliberately deceived with regard to product quality and quantity!

The assessment revealed that it is a very common practice to mix poor-quality potatoes with better quality produce within large sacks and to sell buyers short-weight sacks; many actors expressed an interest in developing a standardized bag which would contain well-graded potatoes. Most were also eager to explore other marketing opportunities associated with the production of processed potatoes.

Final event

All these survey results were presented at a major event in CIP's auditorium (i.e. final event of Phase 1). This was attended by the actors who where interviewed as well as others from the sector, including representatives of governmental and non-governmental organizations (NGOs). After a PowerPoint presentation on the survey's results, a plenary discussion and a motivational sketch (see **Tool 2**), three thematic groups were formed to analyze potential joint business opportunities:

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- "Selected Potatoes"
- "Processed Potatoes"
- "Potatoes for Export".

After a coffee break, each group facilitator began the participatory work with a round of introductions, in which the participants stated their names and their reason for participating. Cards were placed on a blackboard so that participants could indicate what activity of the market chain they represent, from production (left) to consumption (right) (see **Box T5**). This led to an initial discussion about what market opportunities could be approached in each group, based on the interests expressed by the individual participants.

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Each thematic group informed the others of its main conclusions. A sign-up sheet was then passed around to allow those present to indicate in which group they would like to participate in the near future. The meeting closed with a relaxed lunch.

PMCA Phase 2

Because the "Processed Potatoes" and "Potatoes for Export" groups reached similar conclusions during this first event, it was decided to merge them. Consequently, the participatory process continued with two thematic groups: one focusing on "Selected Potatoes" and the other evaluating options for "Processed Potatoes".

Selected Potatoes

Traditional work of a cargo hauler

At its first meeting, the "Selected Potatoes" group concluded that a high-quality product was needed. The suggestion was a standardized 50-kilogram bag containing potatoes that would be selected and classified by producers applying strict selection criteria. Such a quality product would contrast with the produce of the informal marketing system, which uses 120-kilogram sacks that contain, besides usable potatoes, rotten and damaged ones, as well as dirt and even stones!

Over the next three months, the group met eight times to evaluate and define the details of the new business proposition. The last meeting was held at the wholesale market, in the offices of the Cargo Haulers Union. At that time, the PMCA facilitator realized that such a change of environment enhances learning and reinforces the group's identity.

Processed Potatoes

Processing trial using yellow potatoes

The "Processed Potatoes" group initially had more trouble focusing on a specific product. The participants proposed different options for adding value to the potatoes. But, only after several meetings did they finally settle on one option, when one processor expressed his willingness to invest if the group would help him develop the option of potato chips made from native yellow potatoes.

The group began to analyze the frying characteristics of different potato varieties and complemented this work with a Quantitative Market Study (see **Tool 4**). For CIP, the idea of working with native potatoes was extremely interesting, as it would be of particular benefit to small-scale producers in the Andean highlands, where these potatoes are grown.

Final event

After about four months of group meetings, the members of both thematic groups presented their results at a second major event (i.e. final event of Phase 2). Around 80 people from the sector were present. Their feedback helped to ensure that the two thematic groups were taking the right steps to move forwards.

Both thematic groups also took advantage of this opportunity to indicate the additional persons or capacities that they would need to implement their proposals in Phase 3. As a result, the "Selected Potatoes" group was able to contact a lawyer to assist the group with legal issues.

The event was also attended by several new actors who later joined the thematic groups. Special guests were invited from two organizations that manage agricultural information, who were asked to present their work and products. A fruitful discussion concerning the possibility of collaboration followed, and one of the two organizations joined the thematic group meetings in Phase 3.

At the end of the event, a survey form was distributed to evaluate how efficiently PMCA was able to generate interest, trust and collaboration among the different actors. The summary of these responses confirmed what facilitators had hoped: PMCA effectively builds mutual trust through the intense interaction that occurs as a result of participation (see **Figure 8**).

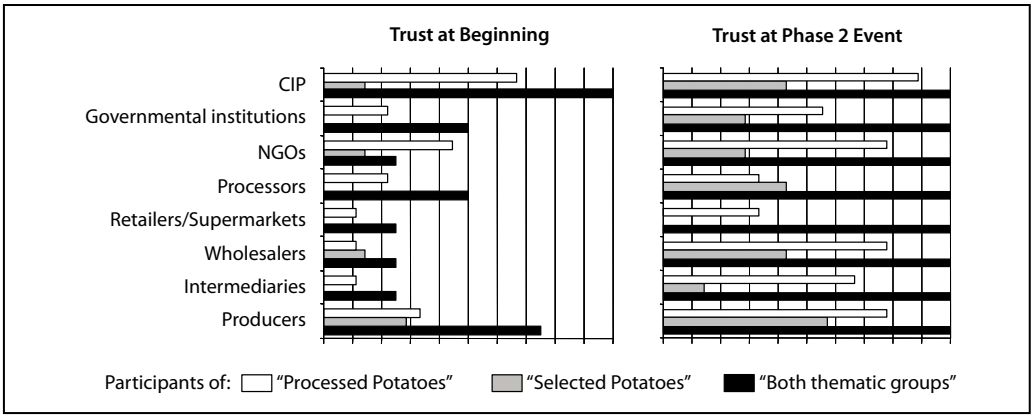

Figure 8 **Rating of trust levels from when PMCA started until the end of Phase 2**

PMCA Phase 3

Selected Potatoes

Thanks to the final event of Phase 2, which "energized" the thematic groups by providing them with new skills, the "Selected Potatoes" group gained the necessary capacity to help them to implement the proposed commercial system to produce and deliver the new 50-kilogram sacks of potatoes. The company which dealt in information, which joined at this stage, was of particular help. This new collaboration allowed the group to prepare two potato marketing bulletins, one detailing prices and the other wholesale supply volumes.

Based on a rapid market survey, the "Selected Potatoes" group chose the brand name "Mi Papa" or "My Potato" for their product. As a result of discussions about who should own the brand name, the actors involved in this thematic group agreed to create a new association called "Cadenas Productivas de Calidad en el Perú" ("Quality Market Chains in Peru") or CAPAC Peru. This would oversee the proper use of the brand name and provide other services designed to promote quality production and the commercialization of potatoes and other agricultural products in Peru. Here, the expert support from a lawyer was essential to identify and dealing legal issues.

Moreover, based on the interest expressed by a participating NGO, part of the group also devoted a considerable amount of time to developing a new potato grader, intended to support the new "Mi Papa" commercialization system in rural areas.

Processed Potatoes

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The "Processed Potatoes" group carried out Focus Group research (see **Tool 5**) to improve the design and packaging of "Papy Boom", the native yellow potato chips (crisps) aimed at children. Further processing trials were also conducted to optimize chip production.

To ensure a supply of clean, uniform yellow potatoes, the processor also began to participate in the other thematic group, "Selected Potatoes".

Final event

After five months of thematic group meetings, the final event of Phase 3 was held on June 11, 2003. The event was carefully organized and carried out with the aid of CIP's Communication Department. More than 100 different actors were invited, not including the media who received a special welcome.

During the first part of the event, the thematic groups presented their progress and achievements, after which a video about Peru's potato commercialization was shown.

The second part of the event was held in CIP's garden, where the potato market chain was displayed using special exhibition booths illustrating the different activities that occur along the chain. With this as a pleasing backdrop, the market chain actors played out their real-life roles, with each one explaining the daily challenges they face, and what the innovations obtained as a result of PMCA meant to them. The demonstration was well received by everyone, providing an excellent opportunity for the market chain actors to come forward and present the innovative products they had produced.

In the days that followed, various interviews were requested and the information was disseminated in newspapers and through radio and TV programs at the national level.

Innovations achieved

The following products were presented and launched to the public at the final PMCA event:

- "Papy Boom"- a brand of yellow potato chips.
- "CAPAC Peru"- a new market chain association designed to improve potato production quality and the commercialization of potato and other crops in Peru.
- "Mi Papa"- a registered brand of selected, classified potatoes packaged in 50-kilogram sacks, which can be used to distribute different varieties of potatoes.
- "Papa al Día" ("Potato Update") and "La Madrugada" ("Early Morning")- two daily bulletins providing prices and supply volumes for more than 20 of the classes of potato sold at Lima's Wholesale Market.

- A semi-portable potato grader- a flexible, low-cost machine that can be used in different production areas to classify potatoes of different sizes.

Follow-up and consolidation

After the final event, CIP's role as the facilitating entity changed considerably. It was no longer CIP's responsibility to lead the meetings; instead, CAPAC Peru took the lead in calling the meetings needed to continue with the "Mi Papa" commercialization scheme. The PMCA facilitators changed their role to one of advisors.

INCOPA (which led the PMCA process) continued to offer specific support to increase the marketplace success of the innovations developed. For instance, it supported a consultancy to help CAPAC Peru develop a business plan and helped to finance the pilot launch of CAPAC's products: "Mi Papa" and its information bulletins from Lima's Wholesale Market. Additional assistance was provided to reinforce the links between CAPAC Peru, the Ministry of Agriculture, the Municipality of Lima (which manages the wholesale market), and other organizations interested in potato commercialization.

CAPAC Peru poster displayed at a national trade fair

In the case of the yellow potato chips, the chip processor and CIP re-evaluated the marketing concept for "Papy Boom" at an export fair with a Rapid Market Appraisal (see **Tool 3**). This study resulted in hiring a new designer who quickly improved the packaging and created an additional marketing concept which was aimed at adults. Both concepts were then evaluated in a Focus Group (see **Tool 5**).

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With regard to the potato selection and classification machine, a series of tests involving different potato varieties was run and several adjustments were made to the initial design. The machine's efficiency was then tested with the help of small-scale farmers. All this information was later used to document the machine's design and operation in an international scientific journal.

Butler G., Bernet T., and Manrique K. 2004. Mechanization of Potato Grading on Small-Scale Farms: A Case Study from Peru. Experimental Agriculture Vol. 41, 1-12.

Brief evaluation of the experience

The question we must ask when evaluating the process as a whole is: how do the results achieved compare with what would have been achieved using a traditional approach?

Altogether, the innovations achieved within one year through the use of PMCA seem to be significant. The investment in time and funding have been worthwhile, both in terms of the quantity and quality of the innovations produced as well as in terms of the information acquired and the contacts made. For both the participants and for CIP, these have borne fruit in areas beyond the scope of PMCA. Even before the participatory process was finished, for example, the new friendships developed among the participants helped them to initiate business deals.

Thanks to this multi-stakeholder interaction, CIP was able to establish important contacts with the private sector, which opened new doors for collaboration in other research areas. Thus, for example, CIP scientists have taken advantage of links with a processor to evaluate the frying quality of new potato varieties. CIP's relationship with the Ministry of Agriculture has also improved thanks to the PMCA experience, which has allowed both organizations to collaborate on other occasions.

Perhaps the greatest weakness of the experience was the fact that small-scale producers were only marginally involved in the thematic group meetings. This was because of the distances involved in actually attending the meeting (i.e. getting to the meetings took potato producers at least one day!). Since INCOPA only paid travel expenses for small-scale producers for attending the major events, most production-related issues were dealt with by NGOs who work directly with these farmers. As a result, high levels of trust were not developed between the potato producers and the other market chain actors. However, this deficiency is now being addressed through CAPAC Peru's work which facilitates access to information and market opportunities.

PMCA Application 2

Promoting the use of native potatoes in Peru

Kurt Manrique, Cristina Fonseca, Thomas Bernet

Overview

Purpose:	To improve the image of native potatoes in Peru
Who:	INCOPA Project (CIP), in conjunction with the Ministry of Agriculture
Duration:	June 2003 to September 2004

Context

Native potatoes, unlike improved varieties, are the result of potato domestication by pre-Incan cultures over hundreds of years. Peru lays claim to around 2,500 different native potato varieties – more than any other country! They are part of the cultural heritage of the country's highland communities, which have conserved them as part of their ancestral legacy along with indigenous knowledge associated with this marvellous diversity.

Although Peru's native potato varieties represent nearly 80 percent of this crop's diversity, only six of them have a real presence in Lima's markets. The other native varieties fell by the wayside as urbanization boosted the commercial development of other agricultural products. As a result, the majority of native potatoes produced are consumed by those Andean communities that produce them.

One of the most important products of native potatoes is "tunta" or "white chuño", which is naturally freeze-dried and processed by small-scale farmers living on the Altiplano, the high plains of southern Peru and northern Bolivia.

"Tunta" production in Southern Peru

PMCA Phase 1

PMCA began with a survey to assess chefs' knowledge and preferences for using "tunta" in Lima, Peru's largest market with 10 million inhabitants. In one month, 34 interviews were carried out. These involved mainly chefs working in restaurants and cooking schools, but also a few potato traders who deliver potato to restaurants and other commercial users.

Final event

Based on the results of this survey, the first PMCA event was organized in close collaboration with the Ministry of Agriculture's General Office for Agricultural Promotion (DGPA). About 60 participants from the potato sector were present at this event, including producers, traders, processors, retailers, chefs, researchers and tourist agents.

The survey's results, presented during the first part of the event, together with the discussion which followed this presentation, confirmed that there was general interest in promoting the use of native varieties particularly through improved packaging and novel dishes. However, survey results also revealed certain limitations in relation to the use of native potatoes: (1) a lack of knowledge about cooking times and how to prepare native potatoes, (2) the fact that they are difficult to peel, and (3) the pronounced seasonality of supply (May to August).

The survey found that "tunta" is mainly consumed by people whose roots are in the Altiplano and south-

ern highlands, and mainly by the older generations of immigrants; the younger generations are losing the habit of consuming "tunta". Only a few restaurants offer "tunta" as a regional specialty from the regions of Puno, Cuzco and Arequipa; however, these were having difficulties obtaining quality produce with a good flavour and smell. Overall, the product is little used in Lima's gourmet cuisine. Some chefs mentioned that "tunta" has major shortcomings, such as an apparent lack of versatility and a strong smell and taste which consumers in Lima tend to shun.

After the presentation of the survey results, the PMCA facilitators performed a sketch (see Tool 2), to emphasize the need for collaboration among market chain actors to promote native potatoes.

After a break, guided by PMCA facilitators, the participants divided into two thematic groups: the "Native Potatoes" group and the "Tunta" group. The various actors then introduced themselves and mentioned the main reason why they were interested in participating in these activities. Based on those interests, possibilities for collaboration were discussed.

The "Native Potatoes" group came up with the following potential innovations: the production of a recipe book about native potatoes, the development of a marketing concept which could be used to sell native potatoes in supermarkets, and the formulation of instant soups based on native varieties. The "Tunta" group concluded that new recipes for using this traditional, but forgotten, product should be promoted with catering schools. They identified the need for a permanent supply of high-quality "tunta" to satisfy the demanding market in Lima. Both groups expressed interest in knowing more about CIP's activities in relation to native potatoes and in having access to available literature.

After a brief report from a representative of each group on what had been discussed in the individual meetings, the event ended with a tasty lunch that included the sampling of different native potato varieties.

Thematic group discussion during first event

PMCA Phase 2

After the first event, the two thematic groups held parallel meetings every two weeks for nearly six weeks, in order to discuss and analyze the different commercial options identified by both groups.

"Tunta" group

The "Tunta" group included chefs from catering schools and restaurants who specialize in "nouveau Andean cuisine". From the outset, the group was mainly interested in researching and creating new dishes using "tunta". These research activities were made possible by shipments of high-quality "tunta" produced by farmers in the community of Ullacachi in the Altiplano region of southern Peru.

The results of this culinary research were surprising: the chefs quickly developed culinary creations that pleased the most demanding diners, even those unaccustomed to eating "tunta" and unfamiliar with its particular taste! Encouraged by this progress, the chefs expressed an interest in creating a cookbook containing both traditional and new recipes.

To ensure a supply of high-quality "tunta", the group decided to work with the "tunta" producers in Ilave who could supply quality produce. With support from the NGO PIWANDES, INCOPA's local partner, the Association of Tunta Producers of Ullacachi was formed to help its members access new regional markets, including Lima and La Paz.

During Phase 2 of the PMCA the group also expressed an interest in developing products that would allow them to sell "tunta" with modern packaging. The

first initiative was to develop a marketing concept for selected and graded "tunta", to be sold in plastic bags with its own brand.

Based on interest expressed by a private company, research was also done to determine whether "tunta" could be used for the industrial production of instant soups. This gave rise to various research activities to determine quality standards for processing and using "tunta".

Catering school students doing culinary research using "tunta"

"Native Potatoes"

The "Native Potatoes" group included producers, processors, chefs, communication experts, researchers and extension agents. Because of the interest expressed by the actors during the first event, and to get everyone up to speed as quickly as possible, the group work began with presentations by different CIP scientists, who explained their work with native potatoes. The group then began to discuss options for promoting native potato consumption. One idea that won approval was the publication of a recipe book that would also describe the history, cultural importance and the enormous diversity of native potato varieties in Peru. After several meetings, this initiative was enriched with ideas from the "Tunta" group, who wanted to include their culinary innovations in this book. Another idea that was taken up was the preparation of a catalogue of "Peruvian potatoes" to provide practical informa-

tion about native varieties with the greatest culinary potential.

The "Native Potato" group was also interested in capitalizing on the fact that native potatoes are a natural product. A designer was hired to develop a package to sell fresh native potatoes in supermarkets. The group agreed on "T'ikapapa" ("t'ika" means "flower" in Quechua) as a generic brand name for 1.5-kilogram bags which could be used for different, little known, varieties of potato.

At the same time, the group analyzed how the supply of these potatoes could be made less seasonal through better crop planning across different production areas.

Based on one company's demand for the development of soups made from native potatoes, the group also began to think about ways to dehydrate native potatoes. To avoid the excessive losses that result from peeling native potatoes, which have very deep eyes, it was decided to develop a natural, nutritious and healthy whole-potato product: instant mashed potato flakes made from unpeeled native potatoes. The group asked a processing expert from the Ministry of Agriculture to help with the first tests, when several varieties were evaluated, each with a different colour and flavour.

Processing trial to produce instant mashed potatoes

Final event

At the second public event, which ended Phase 2, both thematic groups presented their progress and specific work plans for Phase 3. New actors were also invited to the event, to reinforce the capacity of the two working groups to implement their plans.

The event ended with an outstanding luncheon prepared by two catering schools and a restaurant, which had participated in the PMCA process. They presented different dishes using "tunta" and instant mashed native potatoes as the main ingredients.

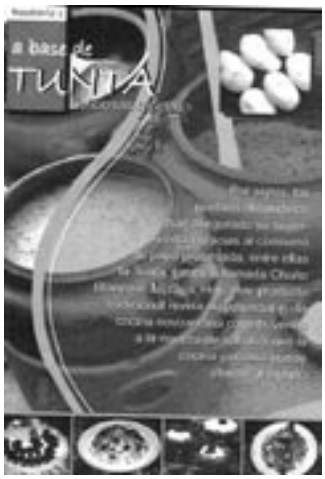
Presentation of product ideas during the final event

PMCA Phase 3

Over the final six months of PMCA, which led up to the final event of Phase 3, most of the ideas proposed were transformed into reality. While important decisions were made during group meetings, specific tasks were contracted out to specialist consultants, including the preparation of marketing concepts, the design of brands and packaging, processing trials and shelf-life studies.

"Tunta" group

Thanks to the culinary research undertaken by the "Tunta" group, more than 30 new recipes were developed that used "tunta" in appetizers, entrees, soups, main dishes and desserts. The participants' enthusiasm and their media contacts led to the publication of these recipes in newspapers and magazines. In addi-



Recipe booklet for "tunta"

tion, with the help of a designer, five different "tunta" recipe booklets were produced and printed.
At the same time, two chefs in the group worked with a food science expert to develop various types of instant soups. A taste panel then helped to identify the four most promising formulations for commercial soups.

A marketing expert evaluated commercial names that could be used for the instant soup and the packaged "tunta". The preliminary brand names chosen were "Del Cheff" and "Tunta Andina," respectively. Just before the final event, draft labels and draft commercial packaging were prepared, so that the products could be presented to the public with a more professional "look".

"Native Potatoes" group

The "Native Potatoes" group held smaller meetings on particular topics to move ahead simultaneously in different areas. Concrete steps were taken to involve a publishing house in the production of the book on Peruvian potatoes. Unfortunately, however, the launch of a similar book by another author during this phase brought this initiative to a temporary standstill.

Recipe booklet for "Puré Andino"

More successful was the development of "Puré Andino" (the mashed potato product made from native varieties) and "T'ikapapa". Since a Lima supermarket chain expressed considerable interest in selling fresh native potatoes, the "T'ikapapa" marketing concept was quickly completed and the product was actually launched commercially before the final PMCA event!

This said, further Focus Group research was still conducted (see **Tool 5**) to refine the final presentation and to determine an appropriate sale price. To ensure continuity of supply, the trading company involved reached purchase and sales agreements with potato producers. In collaboration with the D'Gallia Catering School, an active participant in this thematic group, promotional activities were planned in supermarket stores.

After several industrial tests of the instant mashed potato products made from native varieties, process-

Package of the instant mashed potatoes produced

ing was fine-tuned using the yellow potato variety "Amarilla Tumbay". This variety was outstanding in taste tests, including those conducted in Switzerland and Germany. Work on this product also involved a market study, carried out by three University students which included two Focus Groups, one focusing on Peruvian consumers and one on U.S. citizens living in Lima. This work helped to optimize the marketing concept, which was later realized by a graphic designer who was supervised by the group's PMCA facilitator.

Just before the final event, various publications were produced, including two information sheets (one on "T'ikapapa" and another on "Puré Andino"), and a booklet of recipes for the new instant mashed potato, including well-known Peruvian recipes such as "causa rellena" and stuffed potatoes.

Final event

The final event of Phase 3 was held at CIP's headquarters in Lima and involved nearly 200 participants, including producers, processors, exporters, chefs, researchers and representatives of government agencies and non-governmental organizations. About 30 journalists from television stations, newspapers and specialist magazines also attended. The program included a brief review of PMCA's achievements by the Minister of Production and 28 tasty dishes prepared and presented by four distinguished catering schools using "tunta" and native potatoes.

The program consisted of two parts. The first was held in CIP's auditorium, where the market chain actors of each thematic group presented their activities and achievements. The second part of the program took place in a special tent set up in CIP's gardens, where the four cooking schools displayed their "star recipes" and the two thematic groups presented their innovations in a display that represented the market chain (see **Box T16**). The event ended with a social luncheon featuring "pacha manca" (potatoes and meat cooked in a pit with hot stones) and the dishes developed by the cooking schools.

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Presentation of "star recipes" at the final big event

Innovations achieved

The following products were presented and publicly launched at the final PMCA event:

- "Tunta Andina": a bag containing selected, classified "tunta" and designed to be sold in supermarkets accompanied by appropriate recipes.
- "Del Cheff": an instant soup made from "tunta" flour and other Andean ingredients.
- "T'ikapapa": the first commercial brand of native potatoes sold in Peruvian supermarkets.
- "Puré Andino": a natural instant mashed potato made from unpeeled native potatoes.
- Recipe pamphlets: different booklets containing recipes for new dishes that use "tunta" and the instant mashed potato "Puré Andino".

Follow-up and consolidation

The activities that followed PMCA mainly involved the consolidation of the products presented at the final event. The labels for "Tunta Andina", "Puré Andino" and "T'ikapapa" were finalized and an additional recipe booklet was created with the help of a German chef. This used the instant native mashed potato flakes

"Puré Andino" soup developed by a German chef

produced by the project in international dishes such as gnocchi, croquettes, cream of potato soup and desserts. More work was also needed to refine the instant soups produced, in order to improve their flavour and reduce costs.

The work of balancing supply and demand in order to ensure that "T'ikapapa" was commercially viable was spearheaded by the company that sold the product in supermarkets. However, supply problems due to the strong seasonality of Peru's native potatoes led CIP to step up its research into post-harvest issues. As a consequence, the INCOPA project sponsored a thesis designed to evaluate the use of sprout inhibitors in the storage of native potatoes. The native potato catalogue suggested by those involved in PMCA was also taken on by CIP; this catalogue highlights those varieties that show most promise for commercialization under the "T'ikapapa" brand.

Brief evaluation of the experience

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Without doubt, this second application of PMCA benefited a great deal from the first one (see **Application 1**). It had access to a number of highly motivated participants who already trusted each other and were familiar with PMCA as a mode of work, and facilitators who knew the potato sector well and felt secure about applying PMCA to this new situation.

Moreover, focusing PMCA on the use and commercialization of native potatoes was highly consistent with CIP's mandate. Any success resulting from this work would benefit poor producers in the Andean highlands, both directly (through income generation) and indirectly (by promoting the value of neglected crop).

To ensure a steady supply of native potatoes, stronger links were established with potato producers during this application of PMCA. In the case of "tunta", a special event held in Puno, the main production area of "tunta" in Southern Peru, helped to inform producers about PMCA and thus involve them in the

Celebrating the 1st National Potato Day in Peru at CIP's headquarters

Revamping people's perception of potato on National Potato Day

participatory process. This spurred the creation of the Association of Tunta Producers of Ullacachi which was designed to meet the market demand for high-quality "tunta". In the case of native potatoes, the commercialization of "T'ikapapa" created close ties with Andean communities who began to sell their potatoes to those running this new business.

While two companies took an interest in bringing forward "Puré Andino" (the instant mashed native potato product) the "Tunta" group lacked a company eager to invest in the launch of an instant "tunta" soup. One entrepreneur was interested initially, but pulled out because the product development process appeared to him too slow and too complicated; moreover, he was not comfortable with the fact that the product and processing information were not strictly confidential.

The issue of confidentiality in particular demonstrates that there are critical issues which need to be taken into account when dealing with the private sector. So far, PMCA has no concrete answers to this, and relies rather on very capable facilitators who are able to manage such issues on a case-by-case basis. Hopefully future applications will provide more insight into how PMCA can better attract companies able to co-invest and successfully launch and promote new products in the market.

Not all of the ideas finally led to new products, as is generally the case in any innovation process. The most important outcome of this work was the very wide promotion of native potatoes through TV, radio and press that led to the institution of the National Potato Day, which was celebrated for the first time on May 30, 2005 amidst great publicity!

PMCA Application 3

Generating new products in the Bolivian potato sector

Augusto Guidi, Pablo Mammani, Claudio Velasco

Overview

Purpose:	To generate new market opportunities for the Bolivian potato sector, especially with native potatoes
Who:	PROINPA Foundation
Duration:	2003 to 2004

Context

In Bolivia, the PROINPA Foundation is working on various projects designed to link small farmers to markets. In 2003, through the Papa Andina Initiative, staff from PROINPA were introduced to PMCA and saw evidence of its initial successful application in Peru. It was agreed that applying this method would be useful in Bolivia, so giving impetus to work already in place and taking advantage of new market opportunities in the potato sector. It was hoped that PMCA could be effectively used to promote the development of strategic partnerships between producers and other actors in the market chain.

Since PROINPA already had several projects underway, PMCA was mainly used to enhance the quality of the interaction among market chain actors and to foster the establishment of agricultural businesses. For example, PROINPA had already conducted two studies which it was able to use as the basis for applying PCMA: one on the potato food chain in Bolivia and one on the market chain associated with "chuño" and "tunta" (two forms of dehydrated potato) in Bolivia's Central Altiplano.

PMCA Phase 1

As part of PCMA's initial market chain survey, around 50 interviews were undertaken involving different actors from the potato sector to gather qualitative information about the commercialization of native potatoes in Bolivia's major cities: La Paz, Cochabamba and Santa Cruz. The results of these interviews raised interesting ideas for potential agribusinesses; however, they also revealed the limitations of PROINPA's existing activities in relation to the market chain.

Final event

With this information in hand, the final event of Phase 1 was held. This involved different actors from the potato market chain and supporting R&D organizations. After being informed about the results of the survey, participants were asked to join a thematic group to examine the potential of different kinds of agribusinesses based on their interests. Participants agreed to work on the following:

- **Native potatoes** in the community of Candelaria, in collaboration with APROTAC, a local farmers' association which was already conducting research on local native potato varieties and ways to commercialize them.
- **"Chuño" and "tunta"** in the area of Qollana, in the central Altiplano, where producers make these traditional foods from native potatoes and are eager to improve their production technologies in order to obtain a quality product that can be exported.
- **Seed potatoes** in the municipalities of Pocona and Morochata, where different farmer groups seek to provide high-quality potato seed to producers in the mesothermic valleys of Santa Cruz.
- **High-quality potatoes** in the area of Comarapa and Saipina, where farmers are interested in supplying potatoes to supermarkets, the potato chip industry, fast food outlets, specialty chicken restaurants and snack shops.

Stakeholder meeting with APROTAC, in Cochabamba

PMCA Phase 2

Based on the first public event, APROTAC farmers in Candelaria, who were already working with native potatoes, became very involved in the PMCA process to identify new market opportunities for these varieties. PROINPA had already provided organizational support and training to help farmers meet market demand by providing an adequate supply of produce. In addition, a previous project had provided equipment for potato selection, washing and packaging. Despite these efforts, options for marketing native potatoes remained limited. Producers therefore hoped that PMCA would help them to make their potato business more dynamic.

During three meetings of different market chain actors, the best agribusiness options were identified. Based on the interests expressed by the actors involved, the following was done:

- Work was initiated with the Slam supermarket in Santa Cruz and the Econatural store in Cochabamba, both of which had expressed an interest in promoting and selling native potatoes in 2-kilogram packages under their own labels. The stores decided to test the market, and began by selling small volumes of the product.
- Frying tests were conducted by LUCANA Industries using different varieties of native potatoes. These showed that the best varieties for frying were "Candelero" and "Pinta Boca". LUCANA Industries was interested in producing chips to expand its own snack line. Pilot studies were therefore run to explore the commercialization of small lots of

"native potato chips" in retail stores such as "ECOFERIA" and "NATUREX". This involved the production of test packaging and labeling.
- The "Q'rica papa" brand of native potatoes was established to sell packaged fresh potatoes to supermarkets and specialty shops. This brand was owned by Candelaria's APROTAC farmers.
- Support was provided to establish APROTAC as a legally recognized organization. This enabled them to sign supply contracts with LUCANA. Moreover, PROINPA agreed to support the market promotion of both native potato chips and the potatoes sold in supermarkets.

PMCA Phase 3

Because many of the project's activities progressed more rapidly than expected, and because consumers demonstrated considerable interest in acquiring such products, Phase 3 continued directly from Phase 2, without a final event. Different activities were undertaken simultaneously:
- Special aluminium-foiled packages were designed, to avoid spoilage.
- Bags were designed for the native potatoes sold at supermarkets.
- Promotional materials were produced, such as posters, a TV commercial and special leaflets.

Another important activity involved organizing APROTAC's potato production and the delivery of its produce to the chip processor LUCANA. The two parties agreed on the volumes, dates and delivery prices for the 2003-2004 growing season. Another activity was designed to help APROTAC farmers improve potato storage and selection, as a way of improving the quality of the potatoes delivered to their new clients.

Final event

To increase the impact of the innovations developed through PMCA, a public product launch was held on July 23, 2003 at the Departmental Chamber of Industry in Cochabamba. The products' benefits were explained to those present at the launch, as was the way in which

PMCA had stimulated organizational processes and the development of shared business opportunities. Participants were also able to taste the new potato products which had resulted from PMCA and to take home sample packages. When the event was over, reporters interviewed the different actors in the chain, paying particular attention to the owner of LUCANA Industries and the president of APROTAC.

Innovations achieved

The following "products" were developed during this application of PMCA:

Marketing concept for native potato chips

- **Potato chips** in a specially designed opaque, lightproof, metallic-colored packaging in a size that responded to market demand (100 g).
- **Native potatoes for sale in supermarkets** with labels that emphasize the diversity and virtues of native potatoes grown by small farmers. The label includes a distinctive caricature potato-man and the logo of the PROINPA Foundation next to its web site address, from which consumers can obtain additional information.
- **A television commercial**, which was aired for a month immediately after the product launch to promote LUCANA's new native potato chips.
- **Two types of publicity posters** demonstrating the products' benefits, to stimulate consumer interest.

Follow-up and consolidation

The process of supplying potatoes to both the market and industry posed difficulties. The follow-up actions therefore included:

- Helping APROTAC farmers to supply high-quality seed from different native potato varieties.
- Providing training in administration and business management to APROTAC.
- Conducting further frying trials with native potatoes in order to reduce oil absorption.
- Conducting a market study to better define the profile of native potato consumers and determine those characteristics that help improve customer satisfaction.

Evaluation of the experience

This initial application of PMCA in Bolivia helped the PROINPA Foundation to refine its objectives and link small-scale farmers efficiently with new markets. Thanks to these ties, farmers have learned to respond to the need for a higher quality product within the market, so enhancing their income.

Based on their shared interest of promoting native potatoes as a commercial and technological innovation, PMCA also built important levels of trust between APROTAC farmers, LUCANA (the potato chip processing company), and supermarkets.

At the final large event, when the products were launched, PMCA's success benefited both the market chain actors involved and PROINPA as an R&D organization. In all, the event sparked interest not only in these new products, but also in the use of PMCA as a mechanism to improve market linkages in other contexts. As a consequence of this experience, different R&D organizations have approached PROINPA eager to learn more about PMCA. In response to this demand, a special PMCA training workshop was conducted in 2005 with support from CIP. This reconfirmed the potential PMCA has for development in Bolivia, both for export crops and crops oriented towards the domestic market.

Packaging for native potato chips

PMCA Application 4

Starting to use PMCA in Uganda

Immaculate Sekitto, Berga Lemaga

Overview

Purpose:	To generate innovative market opportunities for potato, sweetpotato and vegetables in Uganda
Who:	A coalition of 15 R&D organizations with PRAPACE as the Coordinating Partner
Duration:	January – December 2005 (up to PMCA Phase 1)

Context

Sweetpotato is an important food and cash crop in Uganda. In fact, Uganda is the second largest producer of sweetpotato in the world after China, and its production levels continue to increase. In 2003, the UK's Department for International Development (DFID) financed a project with the objective of improving farmers' livelihoods by improving their access to the sweetpotato market. In this project, farmers were connected to various local markets and significant strides were made in increasing the export of fresh storage roots to Europe by sea. During the process, it was discovered that a more participatory approach would be needed to create effective collaboration between sweetpotato farmers and other market chain actors. However, the coalition partners lacked the expertise required to implement such an approach.

In January 2005, DFID approved a one-year joint research pilot project to synthesize PMCA's achievements in Peru and Bolivia and test, adapt and promote this approach in a participatory manner for use in the Ugandan context. Knowledge and experiences of PMCA from the Andes were shared with Uganda through human and institutional capacity building. In consultation with project partners, it was agreed that the use of PMCA should not be limited to sweetpotato

but also be used in the potato and vegetable sector. In order to come up with the most suitable approach for Uganda and the region, the experiences with PMCA in the Andes were analyzed by project participants and compared with other market chain approaches existing in the region. This collaborative learning process involved training workshops and the implementation of three small-scale PMCA projects led by different R&D organizations that have been participating in the project. Progress with these activities is described below.

Initial visit to Peru by Ugandan partners

In March 2005 a Ugandan team visited Peru to get a firsthand impression of PMCA before embarking on project activities in Uganda. Three persons became acquainted with PMCA work in Peru, learning exactly how it was used to bring together the different stakeholders in order to help them work towards a common goal. The team visited a number of players in the market chain (including farmers' groups, markets, supermarkets and researchers) and interacted with different staff from Papa Andina, a Partnership Program of the International Potato Center (CIP), which has promoted the development of PMCA. The Ugandan team drew the following conclusions from their visit:

- The market chain was well organized – the players in the market chain were known to each other and the prices of the commodities were determined at all stages.
- Market and income possibilities are the drivers for change in production and commercialization, and genetic diversity has a special place in making this happen.
- The frankness and readiness of each party to freely share information made clear the confidence and trust the parties had in each other.
- With appropriate empowering and follow-up, farmers can become effective and practical researchers, enhancing technology adoption and utilization.
- Researchers working very closely with market chain actors can create an exciting innovation framework,

which has the potential to change traditions in a way that benefits different actors.

Survey of R&D organizations in Uganda

Activities in Uganda started in April 2005 with a survey of organizations. The purpose was to determine which R&D organizations had experience of market chain activities and which would be willing to be involved in this project. Out of the 44 institutions identified, 20 were interviewed and invited to participate in the project. The following selection criteria were applied:

- Availability of activities related to market chains.
- Interest and availability of competent staff to implement PMCA.
- Reputation in working with other institutions and market chain actors.

The survey showed that most of these organizations faced similar bottlenecks when helping farmers to access markets. They lacked:

- Staff with marketing skills.
- Sound methodologies designed to improve the efficiency of market chains that benefit the poor.
- Cohesive farmer groups able to maintain continuous supplies.
- A system that generates and diffuses market information.

Three PMCA training workshops

20 participants from 15 R&D organizations were trained at the first workshop held in Kampala in April 2005. Participants were introduced to PMCA principles and concepts and evaluated a draft PMCA user guide with the objective of improving it. In a participatory process they selected four crops to which PMCA could be applied: potato, sweetpotato, vegetables and banana. For each of these commodities a proposal was formulated. Proposals were evaluated after the workshop. Because of limited funds, it was agreed to apply PMCA only in the potato, sweetpotato and vegetable sectors.

Field visit to Bolivia

The organizations involved in planning PMCA's Phase 1 application were then invited to the Andes, for a second workshop, in July 2005, to strengthen their knowledge and help them better understand the principles and concepts of PMCA. Face-to-face interactions with Bolivian and Peruvian farmers and processors helped enhance their practical understanding of the method. This was of great relevance for the commodity groups, who then formulated their work plans for PMCA Phase 1.

In December 2005, a third workshop was held, in Uganda, to assess the PMCA experience in Kampala and the method's development potential in this new context. Participants also made suggestions and identified elements and mechanisms that could be used to expand the use of PMCA in Uganda and beyond.

PMCA Phase 1 applications

Phase 1 of PMCA began in August 2005. The participating R&D organizations conducted dozens of interviews with the different market chain actors, including farmers, processors, traders/brokers, transporters, supermarkets, hotels, fast food restaurants, R&D organizations, schools, service providers and consumers. Specifically, 86 interviews were undertaken with various potato market chain actors in the districts of Kampala and Kabale. The vegetable group interviewed 60 different market chain actors focusing on tomatoes and hot pepper in the districts of Kampala and Wakiso. In addition, 55 interviews were conducted with sweetpotato market chain actors from the districts of Kumi, Soroti, Mpigi, Luwero and Kampala. The purpose of these surveys was to understand the different market chain actors and their activities including issues like: levels of governance in the chain, collaboration within the chain and problems encountered in activities, as well as possible solutions and innovations that could be implemented along the chain.

All this information gathered from this survey was analyzed and the results were used to help plan the first event for each of the commodity groups. All the

actors interviewed with other interested groups were invited to this first event, where survey results were presented and discussed in smaller thematic groups based on the possible business opportunities interviewees mentioned in the survey (see **Application A8**).

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Follow-up

The commodity groups' Phase 1 events have energized the actors and encouraged them to continue PMCA work in Uganda. At this stage, the challenge remains to obtain further funding to implement Phases 2 and 3 in order to complete the PMCA cycle. To this end, each commodity group will develop a proposal that specifies the planned activities for these two phases, so helping to continue the work and capitalize on the achievements of Phase 1.

Brief evaluation of the experience

The facilitators and actors realized that many challenges have to be faced when focusing R&D work on the entire market chain. All were convinced that collaborative activities need to be strengthened in order to face these challenges and ensure that business opportunities are identified, pursued and implemented in a fair, transparent and equitable manner.

All the actors involved have already learned much from this initial PMCA experience. The first event has already enabled small-scale farmers to collaborate directly with processors. Concerning the institutional stting, the close collaboration that occurred during Phase 1 has improved trust and the exchange of information. Individual researchers, for example, have mentioned that this new way of working together has already changed their way of thinking. They now realize that it is market demand that should drive their technology and variety development activities. However, the PMCA process must continue into Phases 2 and 3 in order to consolidate the learning, skills development and new contacts achieved so far.

A8. Implementation of PMCA Phase 1 in Uganda

Potato market chain

The first potato market chain event was held on November 28 2005. In all, 26 actors participated. After identifying themselves with certain market chain activities, the participants identified the following major constraints:

- Poor access to clean seed, especially that of improved varieties.
- Poor access to market information.
- Insufficient capital and poor extension services.
- Poor quality of the potatoes sold to end users, due to improper harvesting, sorting and grading.
- Inadequate packaging of both fresh and processed products and a lack of storage facilities, especially at the trader level.

The actors concluded that they must work together to overcome these challenges. They agreed to focus on the following areas to improve the Ugandan potato market chain: (1) the creation of a farmer organization for the collective marketing of quality potatoes, (2) the improvement of the flow of market information along the chain, (3) the better organization of wholesale marketing and (4) the development of improved packaging materials and the identification of the best varieties for use when making chips and crisps.

Vegetable market chain

The vegetable market chain event was held on November 29 2005. In all, 46 actors linked to the production and commercialization of tomatoes and hot pepper participated. After the findings of the vegetable market chain survey were presented, the actors expressed an interest in improving the chain in order to:

- Obtain a stronger presence on the worldwide market throughout the year.
- Match supply with demand for vegetable products with differing quality standards.
- Minimize unnecessary losses by applying proper post-harvest practices and product development.
- Improve competitiveness and compliance with EUREPGAP standards (framework for exports towards Europe based on product traceability).

Based on the desired impacts outlined above, the actors formed two groups: the "Uganda Reliable Vegetable Market Suppliers" group and the "Uganda Market Link" group. Once in these groups, the actors continued to interact, getting to know each other better and discussing future plans and opportunities.

The first group developed its own vision: all actors in the chain would buy and process the produce, working as a group to add value by improving quality and better balancing supply and demand. The group expressed a need for information on the right variety of crops for processing, as well as a need to learn about production and value addition, and methods of ensuring a good flow of information and of strengthening linkages in the chain.

The second group emphasized the need to improve the quality of tomato and hot pepper products and the need to train farmers and enhance their understanding of quality standards and seasonal demands from the market. Both groups realized that the opportunity exists for networking, training and the sourcing of funds if they worked as a team in the chain.

Sweetpotato market chain

The sweetpotato market chain event was held on November 30 2005 and was attended by 83 actors. After presenting the results of the market chain survey and a market chain sketch (see Tool 2), participants formed two groups according to their interests: The "Orange-Fleshed Sweetpotato" (OFSP) group and the "Non-orange Sweetpotato" group.

In the case of the OFSP group, the producers complained that OFSP varieties were not very popular, and were very difficult to sell on local markets in comparison to other varieties (as urban consumers are unaware of the health benefits offered by these ß-carotene-rich varieties). Moreover, consumers like sweetpotatoes that stay firm when cooked, a characteristic of varieties with a high dry matter content. In addition, the vines produced are of a poor quality and are difficult to access, especially during the dry season. Many farmers also find it difficult to differentiate correctly between the different OFSP varieties, as they lack opportunities to learn more about these varieties from each other and other market chain actors and researchers. In general, limited market demand and low prices imply low adoption rates. The processors of OFSP mentioned that very few processing machines are available, partly because of a lack of capital.

In the "Non-orange Sweetpotato" group, producers complained of the scarcity/unavailability of desirable varieties such as Kyebandula. They also complained that the vines produced were of poor quality, and that diseases and pests caused productivity losses. The processors were not aware of technologies that could be used to add value and improve processing. The service providers and researchers said they had many proven technologies that needed to be scaled up and out, but that demand and adoption rates were low. The exporters said that they lacked packaging materials, and complained that the products they receive were poorly labeled, came in poor packaging, and consisted of a mixture of different qualities. The consumers were not happy with what goes on in the market: the price was high for the poor-quality sweetpotatoes that are available at the market. In addition, they also stated that sweetpotatoes are often sold when they are already hard or rotten. Consumers also lack the knowledge necessary to differentiate between varieties, and were not aware that processed products were available.

The actors appreciated being brought together, as this helped them to understand better the players in the chain and the challenges faced by those working in each category. Thus, all agreed to continue this work in upcoming meetings, in PMCA Phase 2.

Challenges when using PMCA

Thomas Bernet, Graham Thiele

"Good preparation means half the job is done."

Content of this chapter

This chapter presents the main challenges you might face when planning and conducting PMCA in the context of your own work. Some of the information provided here is also considered in the PMCA chapter, but with a different focus. Given the importance of this information, we consider that such repetition helps to fully explore these issues.

Introduction

The risk of not seeing other options

At first glance you might be convinced that PMCA is the right method to use: it is logical, straightforward, and promises practical results while enabling market chain actors and the leading R&D organization to gain important insights and develop new contacts. Moreover, beyond the concrete results achieved through the innovation process, PMCA can also bring R&D organizations "closer to the market", helping them to respond better to the demand from market chain actors and the private sector.

This said, however, PMCA is not the best method in all circumstances. For instance, no appropriate organization may be available to facilitate the process, or the market chain in question might not be suited to its application.

Facing the challenges systematically

A PMCA application is a major endeavour which has important implications for the R&D organization leading the process. It not only requires the allocation of staff and financial resources, but also exposes the R&D organization to a truly commercial environment',

implying a willingness to respond to the demands expressed by market chain actors.

Bearing this in mind, it is wise for potential PMCA facilitators to systematically evaluate the internal and external challenges they face. By the same token, it must also be realized that certain critical factors must be tackled as they appear during the application of PMCA. Even with excellent preparation, not all obstacles can be foreseen at the outset. On the contrary, PMCA will always be a hurdle race (see **Figure 9**). Facilitators must therefore know where the hurdles are and be as well prepared as possible to overcome them successfully once they appear. This chapter should help you to overcome these hurdles.

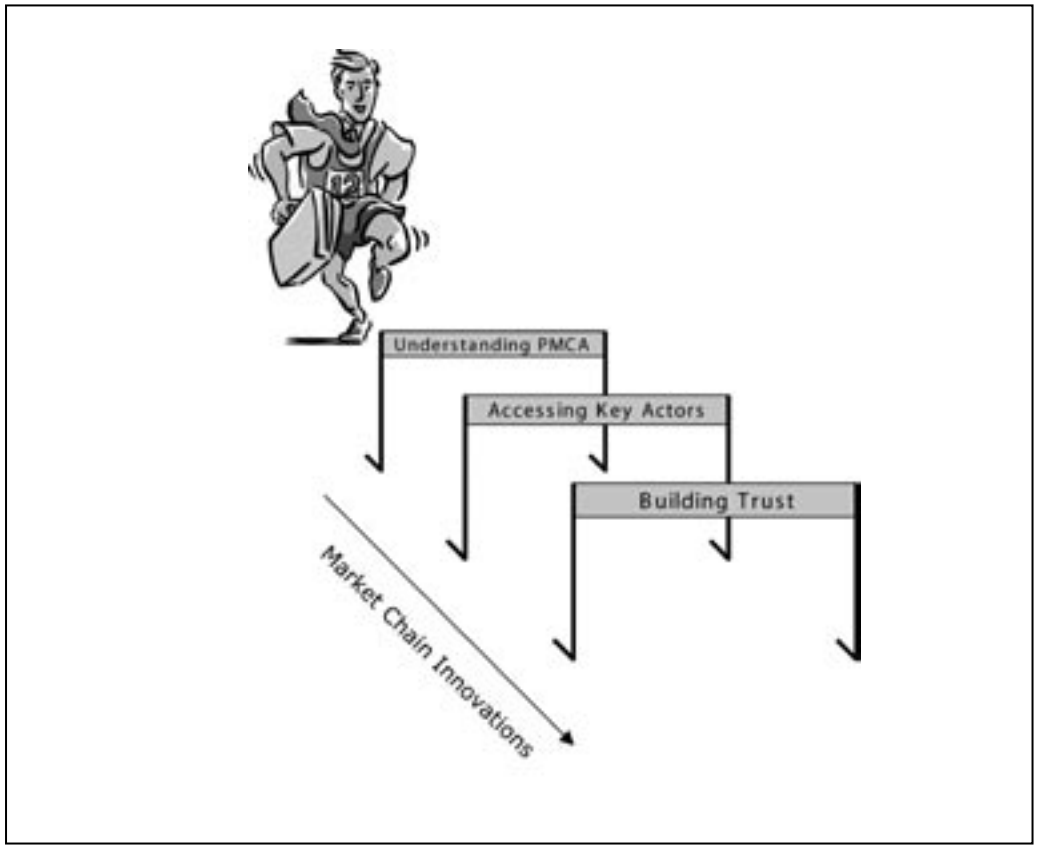

Figure 9 PMCA is a hurdle race

Having the right context of application

Defining "common ground"

PMCA's flexibility to adjust to different contexts should not be stretched too far. All stakeholders involved in PMCA's participatory process should have something in common, to allow their interaction to center on an issue of shared interest. Such an issue could be a commodity, for which specific market opportunities might arise, or a production- or market-related issue, with which participating actors have close ties, based on commercial or social interests (such as organic production or fair trade labeling, for instance).

- Whatever the case, a PMCA application should be able to attract a critical mass of interested stakeholders. If the focus of the PMCA application is fairly broad at the beginning (i.e. relating to an entire sector), it will be necessary to narrow things down and focus on concrete market opportunities by the end of PMCA's **Phase 1**, to allow people to work in smaller, better-focused (thematic) groups.

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Is there room for innovation?

Before applying PMCA to a specific market chain, it is advisable to make certain that the chain in question is not completely dominated by one very strong actor, or only a few such actors, as this might stop other market chain actors from innovating because they fear retaliation.

- If a market chain appears to be rigid, and actors have little room to negotiate changes, PMCA's initial assessment of the market chain (see **Step 1** of **Phase 1**) should reveal whether there is actually scope for innovation. If there is no room for innovation, the survey will at least provide valuable information to explain why this is so, and may suggest interventions for policy makers to change this situation!

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Triggering the desired type of impact

Since every R&D organization has a specific mission, it will be essential to ensure that PMCA is likely to generate the "right" type of impact (e.g. poverty alleviation, sustainable natural resource management, empowerment, gender equity or export promotion).

- It will therefore be important for the R&D organization using PMCA to focus the process primarily on innovations that tend to produce the desired impact. This might not be an easy task, since participants might suggest market opportunities that would link up with strong actors (not the poor ones), who are better placed in the market chain in terms of supply and quality! The Impact Filter (see **Tool 1**) can be helpful when evaluating and choosing the most promising options from a development perspective.

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Farmers with native potatoes in Bolivia: How can they benefit from PMCA?

Having the necessary internal support

Making sure that management backs you up

In R&D organizations with a production-oriented focus, the PMCA might come across as an abstract concept. Not all staff will find it easy to perceive the practical value of the method, particularly when they discover that several of the tools used are not new to them! To ensure internal commitment to this demand-driven approach – and mobilize the necessary resources, in terms of staff and funds – PMCA's usefulness must be clearly communicated and understood at higher levels of the organization. This can be achieved by:

1. Demonstrating that current approaches do not tackle the main problem, which relates to market chain deficiencies.
2. Revealing PMCA's logic and structure and explaining the implications of its three-phase process for the R&D organization and the market chain actors involved (see **Figure 7**).

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3. Explaining that in the context of the organization's work, PMCA could have an impact similar to that described for the cases outlined in this user guide (see **First PMCA Applications**).

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4. Showing how PMCA could be adapted and used in this new case and what specific outcomes might be expected.

- If management staff and colleagues have difficulties understanding the principles of PMCA and its potential value for a given situation, it may make sense to sell PMCA "in parts". Thus, as a first step, only a market chain survey might be conducted in conjunction with an event at which the results are presented and discussed (= **PMCA Phase 1**). This event would then provide those unsure of the process with the insight required for them to agree that the work should continue into Phases 2 and 3.

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Making PMCA fit with the administration

Most R&D organizations draw up yearly work plans to plan and budget for activities. Since PMCA involves a high degree of uncertainty in terms of what specific activities will be conducted – these are defined within the PMCA process, by participants, based on needs and opportunities – the organization's administration might not like this new working style; not only are the activities to be undertaken unclear, but also the amount of funds that will be needed and when they will be spent is not fixed.

- It will be important to negotiate internally more flexible budgeting. Optimally, a work plan should be produced that covers all three phases of PMCA, where each phase is be assigned a "rough" budget, based on generic process-related activities (including, for instance, the market chain survey, the final events, money for hiring consultants, etc.). This flexibility will need to be maintained when the budget is actually spent. If a flexible donor agency is willing to finance particular PMCA applications, this internal negotiation process might become much easier.

High-level decision makers invited to the closing PMCA event in Peru

Having the required leadership skills

Forming a team of facilitators

A team of three to six capable and willing persons trained in the method should be on hand to apply PMCA. The person who knows PMCA best should take the lead in bringing the method across to his or her team mates. Within the team, two or three of the members should have good facilitation skills to lead thematic groups; a lack of technical knowledge concerning a specific market chain is less relevant at this stage, as it can be gained during PMCA's Phase 1, when the market chain survey is undertaken.

- If an R&D organization lacks the skilled staff needed to implement PMCA, specialized consultants can be hired for facilitation. Alternatively, partnerships with other R&D organizations can be formed to access complementary skills and contacts. From an institutional point of view, such partnerships could be interesting, as they potentially add value to future R&D projects.

Focusing on value creation

How successful PMCA is judged to be, will depend upon whether or not real benefits are generated, for both consumers (users of innovations) and the market chain actors (producers of innovations). To ensure that innovations generate such benefits, PMCA facilitators must encourage the kind of creative thinking that leads to the production of "high value–low cost" solutions in the form of specific products. Since the starting point for this is a coherent understanding of consumers' problems and interests, the facilitators should center the group discussions around the following guiding questions:

1. What do consumers perceive to be valuable in certain products?
2. How can value be created at a low cost?
3. How can collaboration along the market chain add value to products and lower production costs?

- Such a demand-driven focus in group discussions will ensure that the consumer-near market chain actors get actively involved and maintaining their participation. The "marketing thinking" of these actors will also be important to raise issues of social responsibility (see **box C11**) as a way of defining strategies that help capitalize on social aspects linked to production (collaboration with poor producers, production without pesticides and fertilizers, etc.).

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Creating continuous "participation value"

Since attendance at PMCA's thematic group meetings is voluntary, each actor will legitimately ask: is it worth participating? They will expect the cost of participation to be compensated with tangible benefits. It is the role of facilitators to provide the necessary leadership during the PMCA process to ensure that the participants are benefitted at every stage of the participatory process. Initially, gains may have the form of valuable lessons learned, relevant contacts made or simply personal satisfaction from working as part of an interesting team. Later on, economic benefits derived from innovations and partnerships will pay it for the continuing participation.

- Most crucial to the generation of such tangible benefits during the PMCA process is the facilitators' attitude. Being the only ones paid to participate in the thematic group meetings, facilitators must be clear in their own minds that they work for the participants – and not vice versa! Thus, meetings must be planned and held with a high degree of dedication and enthusiasm. In addition, efforts must be made to enhance values that promote mutual respect and trust, even more so if discrepancies in views and interests exist among the participating stakeholders.

Cargo haulers demonstrating the advantages of the new 50-kg bag

Wise management of decision-making

Since active participation in PMCA is driven by stakeholder interest, facilitators must be very sensitive to how decisions are taken, especially when they relate to what activities are undertaken, how they are undertaken, and by whom! Certain decisions might need to be taken by the R&D organization, such as focusing only on business options that favor the R&D organization's mission. However, most other decisions should be taken democratically together with the participants. Put bluntly, participants must feel that their participation is real, and that they have both a voice and a vote.

- Throughout the PMCA process, facilitators must view decisions as "bricks" in a construction process to build concrete joint innovations. On the foundation of common interests, they must be well-placed in a logical order and time sequence. Where these "bricks" are not placed well, or some "bricks" are missing, the outcome of PMCA is at risk.

Having the means to attract the relevant actors

Targeting actors with potential

Those actors who are interviewed in PMCA's market chain survey and who are then invited to participate in thematic group meetings should meet some basic criteria: they must be willing to share information, be interested in collaborating and have a certain degree of influence, or power to "convince" other actors.

- Importantly, the R&D organization should try to ensure that all the actors that join the process have a good reputation, possibly by following the recommendations of "good people" that have a good reputation. A collaborative spirit is even more important in the case of those actors who join the process at a later stage! Quarrelsome and egocentric actors must be avoided.

Bringing the main beneficiaries on board

PMCA tries to give room to those actors who are in the best position to identify real market opportunities and give shape to innovations which will be beneficial both to consumers and to the participating market chain. The involvement of rural producers should be carefully managed, since difficulties of access and communication might hamper their active attendance. Initial group discussions need to focus on issues such as market demand and processing options where small-scale farmers often have little knowledge to contribute.

However, if PMCA is used, for instance, to empower small-scale farmers by providing them with improved market access, the R&D organization must find ways to ensure that these actors remain sufficiently "close" to the PMCA activities, to make them feel that they are part of the process and have a stake in the business that results from PMCA.

- Whatever the case, the leading R&D organization must define mechanisms to ensure the appropriate involvement of its main beneficiaries (e.g. small-

scale producers). Most importantly, these actors must be invited to the final events of each phase, where they will be provided with an update on the progress achieved and have the chance to interact with other market chain actors. Linked to these events, special visits to the facilities of certain actors (e.g. processing plants and supermarkets) might be set up to provide further occasions for interaction and trust building. If producers live in distant locations, special trips to the field could also be organized for the market-near actors in the thematic groups, so that they are able to meet producers on their farms.

Assessing enterprises before involving them

PMCA is likely to attract small and medium-sized enterprises (SMEs), as the method offers them considerable opportunities, such as access to relevant information, new contacts and potential funding that could be used to develop business opportunities. However, the lack of commercial strength and professionalism of some of these enterprises might jeopardize PMCA's outcome.

- The leading R&D organization must try to assess the quality and reputation of enterprises before trusting them completely and passing on to them commercial responsibility for jointly developed products. If their reputation is good, PMCA can help strengthen such small or medium-sized enterprises. But, if the assessment reveals weaknesses, the facilitators should try to bring other, more promising enterprises into the process.

Informal interaction between an entrepreneur and potato growers at one of the large final events

Having clear how to plan and monitor the PMCA process

Defining a general PMCA supervisor

The facilitators involved in the daily business of PMCA are in great danger of losing their ability to see the "big picture". This risk is even higher when researchers lead the thematic groups, as they tend to "get lost" in technical details!

- For the R&D organization using the PMCA, it is therefore prudent to have one person supervising the whole PMCA process, helping the facilitators to plan each phase and ensure that their activities remain true to the principles underlying PMCA (see **Figure 7**). Such a supervisor should ensure a participatory working style, and involve the different PMCA facilitators when planning and assessing the general activities of each phase and the work within the thematic groups. Key moments to hold such meetings with facilitators might be: (1) when a new phase is planned, and (2) when a final event is to be organized. The **Annex** of this guide provides a useful overview for this planning and evaluation task.

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Monitoring the process in thematic groups

How successful PMCA is will mainly depend on the quality of the work conducted in the individual thematic groups. Good progress requires well-planned meetings. Thus, facilitators should invite their group participants to the meetings with an established agenda, clarifying the objective of each meeting and defining the issues that need to be discussed. At the end of each meeting, a summary should be prepared so that it can be shared with the whole group later.

- Summaries of all the thematic group meetings should be compiled and regularly evaluated by the facilitator, to provide him or her with an overview and ensure that the group is kept on track. At the end of Phases 2 and 3, these summaries could go

into a "Phase Report", to facilitate later assessment of the whole PMCA process. At the level of each thematic group, the process can be monitored with fairly simple "soft indicators" such as the degree of participation, key learning, building of trust and induced collaboration, etc.

Planning session of the sweetpotato commodity group in Uganda

Glossary

Actor
An individual person or organization from the public or private sector involved directly or directly in the PMCA or other participatory process.

Added value
The increase in value of a product or service, from the perspective of users, at any point along the market chain. Such growth in perceived value can result from product transformation or improved communication.

Approach
A broad methodological framework that uses general principles to guide the work towards a specific goal.

Brand
A specific, legally registered and protected name which generates a specific image for a particular product or group of products in the market. A good brand creates commercial value in its own right, and needs to be carefully maintained to avoid the brand image being damaged. The rights to use a brand are owned and can be transferred, totally or partially (franchising).

Collaboration
A situation which involves two or more actors working together to achieve a common goal.

Competitiveness
The degree to which a person, an enterprise, a market chain, geographical area or a product is able to outperform its competitors. In the short term, "competitiveness" refers to having a more favorable cost–benefit ratio than its competitors. In the long term, competitiveness refers to the ability to add value to processes and products based on a good understanding of consumers' needs. This implies strategic thinking and the capacity to access, combine and use the necessary production factors, while maintaining the flexibility required for change.

Effectiveness
The relevance of an activity in relation to a concrete goal. Effectiveness can relate to efforts made by individual or collective actors, and to some extent gauges the positive impact they generate, through either direct interventions or policy measures.

Efficiency
The relationship between input and output. Efficiency can relate to processes, products and actors, and is used to assess yield in relation to the use of production factors, such as money, time, energy, raw materials, land, water, etc.

Empowerment
The process of strengthening people's capacity and their ability to access resources that will enable them to manage those variables that most affect their lives. Empowerment usually implies strategic action to improve the socio-economic environment of the poor and disadvantaged, including better integration into market chains.

Facilitation
The active creation of conditions that enable actors to interact, learn from each other and take joint action. In participatory R&D processes and other type of interactions, a "facilitator" is needed: a person who structures and unobtrusively manages group discussions with the aim of establishing an environment which fosters affinity and trust among actors.

Gender
A person's sex is biological, but their gender is defined by society. Gender is what society makes of sex: it is the accumulation of social norms dictating what men and women "should" be and do. Ideas about gender shape personal relationships and institutions, and have an impact at all scales from the household to governmental agencies. Gender roles and perceptions are subject to constant change.

Gender analysis
The study of the social, cultural and economic relationships between women and men in different arenas. Gender analysis is not just about women – men are also part of the picture. Gender analysis requires one to examine fundamental issues such as: the ways in which notions of masculinity and femininity are defined and enacted in everyday life; the social roles, needs and power distribution associated with women and men; and the gender dimensions within institutions and organizations.

Human capital
The set of capacities possessed by individual actors that can be used for production processes. Human capital can be created through investment in learning, and is enhanced through training or work opportunities that provide new experiences. Human capital is also critical in enhancing social capital among actors.

Innovation
A new idea or product which is introduced to society or to the market and which changes the way things are done. In contrast to inventions, innovations always add value to, and enhance the competitiveness of, their users.

Innovation system
The group of organizations and individuals involved in and around an innovation process, together with the institutions (norms and rules) that govern the interactions that occur between them.

Institution
Unlike the term "organization" (which refers to a group of people with a shared goal) the term "institution" refers to the norms and rules that influence the possibility of collaboration between actors. Thus, families and firms, for instance, are organizations, while marriage and contract law are institutions.

Invention
A new idea or product. When an invention has a commercial value, it turns into an innovation with a high degree of novelty.

Key actors
Actors who play an important role in positively influencing the outcome of a participatory effort. In participatory R&D processes, key actors might need special attention to make optimal use of their knowledge and influence.

Leadership
The provision of strategic and operational guidance to enable a group of people to achieve their shared goal or goals.

Market chain
All the actors, and the entirety of their productive activities, involved in the process of adding value to a specific crop or product. A market chain involves different interlinked activities: production, transformation, distribution, and consumption. It involves a flow of a product, from production towards consumption, and a flow of money back towards production.

Market chain actor
A person involved individually, or as part of an organization in a market chain and whose income derives directly from the value generated in the chain.

Market segment / niche

Part of a consumer market with specific characteristics. A market segment can either result from differentiating factors related to (1) consumers (e.g. geographic location of consumers, their power of purchase and consumption habits) or related to (2) the market (e.g. product quality, price range and type of application, etc.). These differentiating factors provide the basis for marketing concept development and product positioning. If a market segment is small, it is usually referred to as a "niche".

Marketing concept

First, a marketing concept is a theoretical construct consisting of a set of prioritized or weighted positive product attributes linked to specific market segments. Second, the term also refers to the visual "implementation" of this theoretical construct of positive attributes in the form of a product package, which helps targeted consumers perceive the product's benefits.

Marketing strategy

A structured proposal for how and where to sell a specific product. A marketing strategy implies a clear understanding of the market segment which a specific product should target, bearing in mind both the product's particular characteristics and the needs of potential consumers. A marketing strategy implies the explicit definition of the four "P's": product, price, place and promotion.

Methodology

A set of procedures and guidelines that systematically help to achieve certain objectives. In R&D work, methodologies may relate to broader approaches and may refer to the use of specific tools which should be used in specific situations.

Non-governmental organization (NGO)

An organization characterized by its not-for-profit status. NGOs are commonly financed through external funding and may provide important services to those undertaking different activities within market chains. In some cases, commercial services are provided by an NGO to cover its R&D budget.

Organization

A group of people who collaborate to achieve a common goal and who see themselves – and who are seen by others – as a unit. Hence, organizations can be formal (with a legal institutional framework) or informal. Families, churches and private companies are all organizations. Organizations are shaped by a set of norms (institutions) that govern the behaviour of their members and their interactions.

Participatory Market Chain Approach (PMCA)
A generic R&D process that seeks to generate innovations together with market chain actors.

Public sector
That part of a country's economic and administrative life that deals with the delivery of goods and services by and to the government, aiming to enhance social welfare. Public sector goods are provided at different levels: national, regional and local.

Purchase factors
Product attributes which underlie the consumers decisions to purchase a specific product. To become effective they must clearly be communicated through sound package design and promotion material.

Private sector
That part of a nation's economy that is not managed by the government. In the context of development, the term "private sector" refers mainly to private companies that engage in R&D work as a result of their commercial interests. Thus, by definition, farmers are a part of the private sector, although usually the term is used to refer to private companies.

Product positioning
The strategic commercialization of a product within specific market segments, using a sound marketing concept that relates to well-defined target consumers.

Rapid Appraisal of Agricultural Knowledge Systems (RAAKS)
An R&D method that aims to generate a creative environment in which stakeholders can interact, learn and solve shared problems.

Social capital
The development potential that results from the organizations, networks and institutions that facilitate cooperative action between different actors.

Stakeholder
Anyone who has an interest in, or is affected by, the outcome of a specific (R&D) process or product. The influences of such processes or products can be positive or negative, and a stakeholder can be passive or active.

Stakeholder platform

A "space" within which stakeholders of different types come together to learn, negotiate, define roles and collaborate to achieve a common goal that none can achieve independently. Such a multi-stakeholder environment enables service providers and service users to build trust and enhance market chain competitiveness.

Target consumer

A potential user of the product who represents a specific market segment. The characteristics of target consumers can be very general or very specific, depending on the characteristics of the product being sold.

Target population

The main beneficiaries of a specific intervention. As a target population might be affected directly or indirectly by an intervention, those who make up the target population might not always be directly involved in an R&D process or consulted when interventions are planned.

Tool

An instrument that is used in a particular way to produce a defined result, outcome or impact. In R&D work, the term "tool" implies clear methodological guidelines consisting of steps that ensure correct application.

Trust

The glue that holds human relations together and makes collaboration possible. Trust allows people to share information and resources with a partner in order to achieve together a desired outcome. Trust is built upon prior interaction and needs investment to be strengthened. It can be lost very rapidly as a result of inappropriate behaviour.

Annex 1: Overview to plan and monitor PMCA applications

This Annex presents an overview of the issues and steps to be considered when planning and monitoring PMCA applications. Detailed information can be found in the different sections of this manual, as indicated in the "Reference" column.

Preparation: Facing all the challenges to use PMCA		**Reference (page)**
Issue 1: Having the right context of application?	Does common ground between actors exist which will allow PMCA to be applied? Is there room for market chain innovations? Can the right type of impact be triggered with PMCA?	Challenge Chapter (p. 145)
Issue 2: Having the necessary internal support?	Does management understand the practical potential of PMCA? Will the administrative processes of your organization be able to manage the flexible implementation needed for PMCA?	Challenge Chapter (p. 147)
Issue 3: Having the required leadership skills?	Is a team of at least 3 capable facilitators available? Are the facilitators capable to focus discussion on value generation? Do the facilitators have the skill and attitude to fully serve their group? Are facilitators sensitive to democratic decision-making?	Challenge Chapter (p. 149)
Issue 4: Having the means to attract the relevant actors?	Are the most relevant actors involved in the market chain known? Are the mechanisms clear how to involve the main beneficiaries of PMCA? Are there mechanisms available to assess most relevant entrepreneurs?	Challenge Chapter (p. 152)
Issue 5: Having clear how to plan and monitor the PMCA process?	Is someone in charge to monitor the whole PMCA process? Are mechanisms in place to monitor progress in thematic groups? What documentation will show progress in each phase?	Challenge Chapter (p. 154)

PMCA Phase 1: Getting to know and understand the market chain actors		Reference (page)
Step 1: Rapid assessment of the market chain	Are all segments of the market chain considered for the interviews? Are the most relevant supporting organizations included? Is the sample large enough both to obtain the necessary information and draw in sufficient key actors?	PMCA Chapter / Section Phase 1 (p. 23)
Step 2: Definition of thematic groups	Do the 2 to 3 thematic groups reflect the expressed interests by actors? Is the topic of each thematic group sufficiently different the others? Will all invited stakeholders for Phase 1's event be able to join a group?	PMCA Chapter / Section Phase 1 (p. 28) Tool 1: Impact Filter
Step 3: Holding the final event	Is adequate infrastructure available to hold this event? Are all the materials available to work in parallel in 2 to 3 thematic groups? Are capable facilitators available to lead the thematic groups?	PMCA Chapter / Section Phase 1 (p. 29) Tool 2: Market Chain Sketch

PMCA Phase 2: Analysing potential business opportunities		Reference (page)
Step 1: Providing relevant information	Is the information identified that should be shared at this stage? Are the experts available and willing to present the information required?	PMCA Chapter / Section Phase 2 (p. 34)
Step 2: Evaluating potential innovations	Are the discussion centered around participants' main interest? Are the adequate tools used to analyse the potential innovations? Are new actors drawn to cover the need for additional, lacking knowledge?	PMCA Chapter / Section Phase 2 (p. 35) C8: SWOT-Analysis Tool 3: Rapid Market Appraisal Tool 4: Quantitative Market Study Tool 5: Focus Groups
Step 3: Outlining the opportunities analyzed	Are business opportunities chosen that seem most promising? Are all the issues discussed related to the potential joint innovations? Has the person in charge of summarizing the group's ideas on paper been designated?	PMCA Chapter / Section Phase 2 (p. 39) Tool 7: Business Plan
Step 4: Formulating a work plan	Are all the steps identified to put in practice the joint innovations? Is it clear who will be responsible for what and when? Do all the group participants agree on the work plan?	PMCA Chapter / Section Phase 2 (p. 40)
Step 5: Holding the final event of Phase 2	Is adequate infrastructure available to hold this event? Have new stakeholders been invited with potential to strengthen the groups' work? Is internal key staff invited to become aware of this participatory work?	PMCA Chapter / Section Phase 2 (p. 41)

PMCA Phase 3: Implementing joint market chain innovations		Reference (page)
Step 1: Getting thematic groups organized	Are mechanisms in place to do implementation work in parallel? Is it clear who takes on the responsibility for the different activities?	PMCA Chapter / Section Phase 3 (p. 46)
Step 2: Getting innovations designed	Are the tools used that help in this design process? Do the working groups have access to expert help with design? Is made sure that the group is adequately involved in this design process?	PMCA Chapter / Section Phase 3 (p. 47) Tool 7: Focus Groups Tool 8: Marketing Concept Tool 9: Business Plan
Step 3: Holding PMCA´s final event	Is adequate infrastructure available to hold this big event? Are 1 to 2 VIP persons invited that attract the media? Has material been prepared for the media?	PMCA Chapter / Section Phase 3 (p. 51)

PMCA Follow-up: Consolidation of innovations		Reference (page)
Issue 1: Defining a new role for the R&D organization	Are the commercial innovations in the hands of the private sector? What main role should the organisation play to provide backstopping?	PMCA Chapter / Follow-up Section (p. 56)
Issue 2: Providing different types of support	What different activities would help partners to improve their work? What activities are justified from a public point of view (i.e., subsidies)?	PMCA Chapter / Follow-up Section (p. 56)
Issue 3: Capitalizing on new contacts	What contacts could be important to improve the work in other areas? Have new contacts been made who could become strategically important partners in future work??	PMCA Chapter / Follow-up Section (p. 59)

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Notes

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The International Potato Center (CIP) hosted the projects where PMCA was developed. Moreover, its Training Department provided important technical backstopping in the PMCA training workshops and design of this document.

As a regional initiative, Papa Andina played a key role in validating PMCA and promoted its wider use, especially in Bolivia and Uganda.

CIP's INCOPA project provided the "incubation center" for PMCA, as the method grew out of its activities in the Peruvian potato sector.

The INNOVA project applied PMCA in Bolivia and actively promoted it among national partner organizations and government agencies.

The PROINPA Foundation was the key organization driving PMCA's uptake in Bolivia. It also provided first training workshops to make the method available to other R&D organization in the country.

The Prapace network in Sub Saharan Africa helped to validate PMCA in a totally new context in a capacity building project involving more than 10 different R&D organizations from Uganda.

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